STIC Search Report
EIC 2600

STIC Database Tracking Number: 179000

TO: Prabodh Dharia **Location: KNX 10A65** **Art Unit : 2673** **Wednesday, February 08, 2006** **Case Serial Number: 10/849195**	**From: Virgil O. Tyler(ASRC)** **Location: EIC 2600** **KNX-8B68** **Phone: 571-272-8536** **Virgil.Tyler@uspto.gov**

Search Notes

Dear Examiner Dharia,

Attached are the search results (from DIALOG databases) for your case.

Tags mark the patent/articles, which might be of interest. After you review all records including tagged and untagged records, if you wish to order the complete text of any record, please submit request(s) directly to the STIC-EIC 2600 Email Box or hand carry the request to the front desk of the respective EIC.

Please call if you have any questions or suggestions. I have enclosed a Search Results Feedback Form to facilitate further comments or suggestions. Please take a few minutes to share with us your feedback.

Thanks

Virgil O. Tyler,CLIN Assistant
Technical Information Specialist
ASRC Aerospace Corporation
EIC 2600

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File   2:INSPEC 1898-2006/Jan W3
         (c) 2006 Institution of Electrical Engineers
File   6:NTIS 1964-2006/Jan W5
         (c) 2006 NTIS, Intl Cpyrght All Rights Res
File   8:Ei Compendex(R) 1970-2006/Jan W5
         (c) 2006 Elsevier Eng.  Info. Inc.
File  34:SciSearch(R) Cited Ref Sci 1990-2006/Jan W5
         (c) 2006 Inst for Sci Info
File  35:Dissertation Abs Online 1861-2006/Jan
         (c) 2006 ProQuest Info&Learning
File  56:Computer and Information Systems Abstracts 1966-2006/Jan
         (c) 2006 CSA.
File  57:Electronics & Communications Abstracts 1966-2006/Jan
         (c) 2006 CSA.
File  65:Inside Conferences 1993-2006/Feb W1
         (c) 2006 BLDSC all rts. reserv.
File  94:JICST-EPlus 1985-2006/Nov W4
         (c)2006 Japan Science and Tech Corp(JST)
File  95:TEME-Technology & Management 1989-2006/Feb W1
         (c) 2006 FIZ TECHNIK
File  99:Wilson Appl. Sci & Tech Abs 1983-2006/Jan
         (c) 2006 The HW Wilson Co.
File 144:Pascal 1973-2006/Jan W3
         (c) 2006 INIST/CNRS
File 256:TECINFOSOURCE 82-2005/DEC
         (c) 2006 INFO.SOURCES INC
File 434:SciSearch(R) Cited Ref Sci 1974-1989/Dec
         (c) 1998 Inst for Sci Info
File 583:Gale Group Globalbase(TM) 1986-2002/Dec 13
         (c) 2002 The Gale Group
File 603:Newspaper Abstracts 1984-1988
         (c)2001 ProQuest Info&Learning
File 483:Newspaper Abs Daily 1986-2006/Feb 04
         (c) 2006 ProQuest Info&Learning
File 248:PIRA 1975-2006/Jan W3
         (c) 2006 Pira International

Set     Items   Description
S1       3386   RECURSIVE(S)FEEDBACK
S2      53452   (CHANG??? OR CONTROL? OR VARIABLE OR FLUCTUATES OR INCONSI-
             STENT OR RANDOM OR VACILLAT???? OR SWINGS OR OSCILLAT? OR CYC-
             LE?? OR CYCLIC? OR INTERMITTENT OR PERIOD? OR PULSE?? OR ALTE-
             RNAT? OR PULSAT? OR REPEAT?)(3N)(PULSE()WIDTH)
S3     868309   ELECTRODE?? OR LCD OR LIQUID()CRYSTAL()DISPLAY?? OR LCOS OR
              LIGHT()MODULAT?
S4       6695   (COLOR OR RGB OR RED OR GREEN OR BLUE OR GRAY OR GRAY()SCA-
             LE OR BRIGHTNESS)(3N)S3
S5         98   AU=(GUTTAG, K? OR GUTTAG K? OR GUTTAG, A? OR GUTTAG A?)
S6         13   S1(S)S2
S7          3   RD  (unique items)
S8          0   S7 AND (S3 OR S4)
S9          0   S7 AND S5
S10        62   S1 AND RECURSIVE()FEEDBACK
S11         0   S10 AND S2
S12         0   S10 AND PULSE(3N)WIDTH
S13       161   S2(3N)S3
S14         2   S13(3N)S4
S15         0   S13(3N)S1
```

7/3,K/1 (Item 1 from file: 2)
DIALOG(R)File 2:INSPEC

06344199 INSPEC Abstract Number: B9609-3120B-012
Title: Knowledge-based parameter estimation for identification and equalization of storage channels
Author(s): Shafiee, H.; Moon, J.
Author Affiliation: Dept. of Electr. Eng., Minnesota Univ., Minneapolis, MN, USA
Journal: IEEE Transactions on Magnetics vol.32, no.4, pt.2 p. 3274-82
Publisher: IEEE,
Publication Date: July 1996 Country of Publication: USA
CODEN: IEMGAQ ISSN: 0018-9464
SICI: 0018-9464(199607)32:4:2L.3274:KBPE;1-D
Material Identity Number: I101-96006
U.S. Copyright Clearance Center Code: 0018-9464/96/$05.00
Language: English
Subfile: B

...Abstract: the channel identification problem is reduced to estimation of one or more parameters. Specifically, the **pulse width** at half of the transition response peak magnitude is first estimated. The algorithm is then...

... set of equalizer coefficients or to modify the decoder parameters. We will describe methods for **recursive** filter design based on the estimated channel for partial response as well as decision **feedback** systems.

7/3,K/2 (Item 2 from file: 2)
DIALOG(R)File 2:INSPEC

05881782 INSPEC Abstract Number: B9504-6120-001, C9504-1310-001
Title: Linearly pulse-width modulated block pulse functions and their application to linear SISO feedback control system identification
Author(s): Deb, A.; Sarkar, G.; Sen, S.K.
Author Affiliation: Dept. of Appl. Phys., Calcutta Univ., India
Journal: IEE Proceedings-Control Theory and Applications vol.142, no.1 p.44-50
Publication Date: Jan. 1995 Country of Publication: UK
CODEN: ICTAEX ISSN: 1350-2379
U.S. Copyright Clearance Center Code: 1350-2379/95/$10.00
Language: English
Subfile: B C

...Abstract: varying functions and is also employed to solve linear feedback system identification problem. Also, a **recursive** technique for solving the identification problem in the conventional BPF domain has been derived. Numerical...

7/3,K/3 (Item 3 from file: 2)
DIALOG(R)File 2:INSPEC

03777241 INSPEC Abstract Number: A87003779, C87000797

Title: A discrete-time model of electrically stimulated muscle

Author(s): Bernotas, L.A.; Crago, P.E.; Chizeck, H.J.
Author Affiliation: Case Western Reserve Univ., Cleveland, OH, USA

Journal: IEEE Transactions on Biomedical Engineering vol.BME-33, no.9 p.829-38
Publication Date: Sept. 1986 Country of Publication: USA
CODEN: IEBEAX ISSN: 0018-9294
U.S. Copyright Clearance Center Code: 0018-9294/86/0900-0829$01.00
Language: English
Subfile: A C

...Abstract: nonlinear element, followed by a linear dynamic element. The static nonlinearity describes the relationship between **pulse width** and steady-state force. The dynamic properties are described with less than 10% error by a second-order discrete-time deterministic autoregressive moving-average (DARMA) model. Exponentially weighted **recursive** least-squares methods allow efficient parameter estimation. Model parameters are found to vary systematically with muscle length and stimulus frequency. Tests comparing actual and simulated **feedback** control of electrically stimulated muscle indicate that the model is adequate for the design of...

14/3,K/1 (Item 1 from file: 8)
DIALOG(R)File 8:Ei Compendex(R)

06822416 E.I. No: EIP04178135020
Title: Quadrichromatic white solid-state lamp with digital feedback
Author: Zukauskas, Arturas; Vaicekauskas, Rimantas; Ivanauskas, Feliksas; Kurilcik, Genadij; Bliznikas, Zenius; Breive, Kestutis; Krupic, Jevgenij; Rupsys, Andrius; Novickovas, Algirdas; Vitta, Pranciskus; Navickas, Alvydas ; Raskauskas, Vytautas; Shur, Michael S.; Gaska, Remis
Corporate Source: Inst. of Mat. Sci./Appl. Research Vilnius Univ., LT-2040 Vilnius, Lithuania
Conference Title: Third International Conference on Solid State Lighting
Conference Location: San Diego, CA, United States Conference Date: 20030805-20030807
E.I. Conference No.: 62706
Source: Proceedings of SPIE - The International Society for Optical Engineering v 5187 2004.
Publication Year: 2004
CODEN: PSISDG ISSN: 0277-786X
Language: English

Descriptors: *Solid state devices; Electric lamps; Lighting; Feedback; Light emitting diodes; **Color ; Pulse width modulation ; Light modu lators^Pho** ; Photodiodes; Control equipment; Algorithms

14/3,K/2 (Item 1 from file: 94)
DIALOG(R)File 94:JICST-EPlus

00755928 JICST ACCESSION NUMBER: 89A0490779 FILE SEGMENT: JICST-E
Tonal transfer characteristics of active matrixs color LCD **using** pulse width **modulation method.**
KANNO HIROMASA (1); TAKAHASHI ATSUSHI (1); NAKAMURA YUKIO (1); FURUYA HIROSHI (1); ABIKO ICHIMATSU (1)
(1) Oki Electric Industry Co., Ltd., Res. Lab.
Denshi Joho Tsushin Gakkai Zenkoku Taikai Koen Ronbunshu(Spring National Convention Record, the Institute of Electronics, Information and Communication Engineers), 1989, VOL.1989,NO.Autumn Pt.5, PAGE.5.39, FIG.4, TBL.1, REF.1
JOURNAL NUMBER: G0508ADY
UNIVERSAL DECIMAL CLASSIFICATION: 621.385:621.397
LANGUAGE: Japanese COUNTRY OF PUBLICATION: Japan
DOCUMENT TYPE: Conference Proceeding
ARTICLE TYPE: Short Communication
MEDIA TYPE: Printed Publication

Tonal transfer characteristics of active matrixs color LCD **using** pulse width **modulation method.**

```
File 344:Chinese Patents Abs Jan 1985-2006/Jan
         (c) 2006 European Patent Office
File 347:JAPIO Nov 1976-2005/Oct(Updated 060203)
         (c) 2006 JPO & JAPIO
File 350:Derwent WPIX 1963-2006/UD,UM &UP=200609
         (c) 2006  Thomson Derwent
File 371:French Patents 1961-2002/BOPI 200209
         (c) 2002 INPI.  All rts. reserv.

Set     Items   Description
S1        145   RECURSIVE(S)FEEDBACK
S2      49526   (CHANG??? OR CONTROL? OR VARIABLE OR FLUCTUATES OR INCONSI-
             STENT OR RANDOM OR VACILLAT???? OR SWINGS OR OSCILLAT? OR CYC-
             LE?? OR CYCLIC? OR INTERMITTENT OR PERIOD? OR PULSE?? OR ALTE-
             RNAT? OR PULSAT? OR REPEAT?)(3N)(PULSE()WIDTH)
S3    1182030   ELECTRODE?? OR LCD OR LIQUID()CRYSTAL()DISPLAY?? OR LCOS OR
            LIGHT()MODULAT?
S4      15337   (COLOR OR RGB OR RED OR GREEN OR BLUE OR GRAY OR GRAY()SCA-
             LE OR BRIGHTNESS)(3N)S3
S5        143   AU=(GUTTAG, K? OR GUTTAG K? OR GUTTAG, A? OR GUTTAG A?)
S6          1   S1(3N)S2
S7          1   S1(20N)S2
S8          0   S7 NOT S6
S9          1   S1(S)S2
S10         0   S9 NOT S7
S11         1   S1(3N)PULSE()WIDTH
S12         0   S11 NOT (S6 OR S7 OR S9)
S13         2   S2(3N)S4
S14       251   S2(3N)S3
S15         2   (COLOR OR RGB OR RED OR GREEN OR BLUE OR GRAY OR GRAY()SCA-
            LE?? OR BRIGHTNESS)(3N)S14
S16         0   S15 NOT S14
S17         0   S14 AND (BACK(3N)(PLANE?? OR PLATE?? OR MIRROR??))
S18         1   S5 AND (S1:S4)
S19         0   S18 NOT (S6 OR S13)
S20         0   S14 AND S1
```

6/3,K/1 **(Item 1 from file: 350)**
DIALOG(R)File 350:Derwent WPIX

016695568 **Image available**
WPI Acc No: 2005-019847/200502
XRPX Acc No: N05-016829

Visual display device for personal computer, controls pulse width **using** recursive feedback **for driving electrodes to control each light modulating element of array of light modulating elements arranged on silicon backplane**

Patent Assignee: GUTTAG A (GUTT-I); GUTTAG K M (GUTT-I); KAGUTECH LTD (KAGU-N)
Inventor: GUTTAG A; GUTTAG K M; GUTTAG K
Number of Countries: 108 Number of Patents: 002
Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
US 20040233150	A1	20041125	US 2003471731	P	20030520	200502 B
			US 2004568253	P	20040506	
			US 2004849195	A	20040520	
WO 2004104790	A2	20041202	WO 2004US15877	A	20040520	200502

Priority Applications (No Type Date): US 2004849195 A 20040520; US 2003471731 P 20030520; US 2004568253 P 20040506
Patent Details:

Patent No	Kind	Lan	Pg	Main IPC	Filing Notes
US 20040233150	A1		76	G09G-003/36	Provisional application US 2003471731
					Provisional application US 2004568253
WO 2004104790	A2	E		G06F-000/00	

Designated States (National): AE AG AL AM AT AU AZ BA BB BG BR BW BY BZ CA CH CN CO CR CU CZ DE DK DM DZ EC EE EG ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NA NI NO NZ OM PG PH PL PT RO RU SC SD SE SG SK SL SY TJ TM TN TR TT TZ UA UG US UZ VC VN YU ZA ZM ZW
Designated States (Regional): AT BE BG BW CH CY CZ DE DK EA EE ES FI FR GB GH GM GR HU IE IT KE LS LU MC MW MZ NA NL OA PL PT RO SD SE SI SK SL SZ TR TZ UG ZM ZW

Visual display device for personal computer, controls pulse width **using** recursive feedback **for driving electrodes to control each light modulating element of array of light modulating elements...**

Abstract (Basic):
... modulating element of an array of light modulating elements arranged on a silicon backplane. A **recursive feedback** controller **controls** a **pulse width** using **recursive feedback** for driving the electrodes to control each light modulating element.

13/3,K/1 (Item 1 from file: 350)
DIALOG(R)File 350:Derwent WPIX

016317342 **Image available**
WPI Acc No: 2004-475237/200445
Method for driving plasma display panel
Patent Assignee: LG ELECTRONICS INC (GLDS)
Inventor: LEE B J
Number of Countries: 001 Number of Patents: 001
Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week	
KR 2004021363	A	20040310	KR 200253172	A	20020904	200445	B

Priority Applications (No Type Date): KR 200253172 A 20020904
Patent Details:

Patent No	Kind	Lan	Pg	Main IPC	Filing Notes
KR 2004021363	A		1	G09G-003/28	

Abstract (Basic):
... driving a plasma display panel is provided to control the white balance by applying data **pulses** having different **pulse width** to address **electrodes** of **blue** , **green** , and red discharge cells, respectively.

13/3,K/2 (Item 2 from file: 350)
DIALOG(R)File 350:Derwent WPIX

015401325 **Image available**
WPI Acc No: 2003-463465/200344
XRPX Acc No: N03-368985
Pattern formation method for color **filter of** liquid crystal display , **involves generating sub-** pulses **having varied** pulse width , **rise time and fall time, at preset time intervals with respect to main pulse generation**
Patent Assignee: DAINIPPON PRINTING CO LTD (NIPQ)
Number of Countries: 001 Number of Patents: 001
Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week	
JP 2003154648	A	20030527	JP 2001355852	A	20011121	200344	B

Priority Applications (No Type Date): JP 2001355852 A 20011121
Patent Details:

Patent No	Kind	Lan	Pg	Main IPC	Filing Notes
JP 2003154648	A		12	B41J-002/045	

Pattern formation method for color **filter of** liquid crystal display , **involves generating sub-** pulses **having varied** pulse width , **rise time and fall time, at preset time intervals with respect to main pulse generation**

File 348:EUROPEAN PATENTS 1978-2006/Jan W05
(c) 2006 European Patent Office
File 349:PCT FULLTEXT 1979-2006/UB=20060105,UT=20051229
(c) 2006 WIPO/Univentio

Set	Items	Description
S1	688	RECURSIVE(S)FEEDBACK
S2	29328	(CHANG??? OR CONTROL? OR VARIABLE OR FLUCTUATES OR INCONSISTENT OR RANDOM OR VACILLAT???? OR SWINGS OR OSCILLAT? OR CYCLE?? OR CYCLIC? OR INTERMITTENT OR PERIOD? OR PULSE?? OR ALTERNAT? OR PULSAT? OR REPEAT?)(3N)(PULSE()WIDTH)
S3	232634	ELECTRODE?? OR LCD OR LIQUID()CRYSTAL()DISPLAY?? OR LCOS OR LIGHT()MODULAT?
S4	7557	(COLOR OR RGB OR RED OR GREEN OR BLUE OR GRAY OR GRAY()SCALE OR BRIGHTNESS)(3N)S3
S5	29	AU=(GUTTAG, K? OR GUTTAG K? OR GUTTAG, A? OR GUTTAG A?)
S6	0	S1(S)S2(S)S3(S)S4
S7	5	S1(S)S2
S8	2	S7 AND (S3:S5)
S9	0	S8 NOT S7
S10	5	S5 AND (S1:S4)
S11	4	S10 NOT S7
S12	4	IDPAT (sorted in duplicate/non-duplicate order)
S13	4	IDPAT (primary/non-duplicate records only)

7/3,K/1 (Item 1 from file: 348)
DIALOG(R)File 348:EUROPEAN PATENTS

01674228
Self-oscillating pulse modulation power amplifier with enhanced cascade control method
Selbst-oszillierender Klasse-D Verstarker mit verbesserter Kaskaden-Ruckkopplung
Amplificateur classe-D auto-oscillant presentant un procede ameliore de commande en cascade
PATENT ASSIGNEE:
BANG & OLUFSEN A/S, (441030), Peter Bangsvej 15, 7600 Struer, (DK), (Proprietor designated states: all)
Karsten, Nielsen, (2539981), Nationemes Alle 18, 3000 Helsingor, (DK), (Proprietor designated states: all)
INVENTOR:
Nielsen, Karsten, Nationemes Alle 18, 3000 Helsingor, (DK)
LEGAL REPRESENTATIVE:
Lind, Urban Arvid Oskar (98611), AWAPATENT AB, P.O. Box 11394, 404 28 Goteborg, (SE)
PATENT (CC, No, Kind, Date): EP 1376858 A1 040102 (Basic)
EP 1376858 B1 060104
APPLICATION (CC, No, Date): EP 2003013623 971031;
PRIORITY (CC, No, Date): DK 961214 961031
DESIGNATED STATES: AT; BE; CH; DE; DK; ES; FI; FR; GB; GR; IE; IT; LI; NL; PT; SE
RELATED PARENT NUMBER(S) - PN (AN):
EP 935846 (EP 97910272)
INTERNATIONAL PATENT CLASS (V7): H03F-003/217
INTERNATIONAL CLASSIFICATION (V8 + ATTRIBUTES):
IPC + Level Value Position Status Version Action Source Office:
H03F-0003/217 A I F B 20060101 20031024 H EP
ABSTRACT WORD COUNT: 68
NOTE:
Figure number on first page: 10

LANGUAGE (Publication,Procedural,Application): English; English; English
FULLTEXT AVAILABILITY:
Available Text Language Update Word Count
CLAIMS A (English) 200401 394
CLAIMS B (English) 200601 402
CLAIMS B (German) 200601 380
CLAIMS B (French) 200601 478
SPEC A (English) 200401 4770
SPEC B (English) 200601 3894
Total word count - document A 5166
Total word count - document B 5154
Total word count - documents A + B 10320

...SPECIFICATION of the invention, the controlled oscillating pulse modulator.
Fig. 12 illustrates the principle of an **alternative** three-level **pulse width** modulator for implementation with a 4 transistor bridge power stage. The signals are from top...

7/3,K/2 (Item 2 from file: 348)
DIALOG(R)File 348:EUROPEAN PATENTS

00951148

PULSE MODULATION POWER AMPLIFIER WITH ENHANCED CASCADE CONTROL METHOD

PULSMODULIERTERKEISTUNGSVERSTARKER MIT VERBESSERTEM KASKADIERTEM STEUERUNGSVERFAHREN

AMPLIFICATEUR DE PUISSANCE MODULE EN IMPULSIONS PRESENTANT UN PROCEDE AMELIORE DE COMMANDE EN CASCADE

PATENT ASSIGNEE:
BANG & OLUFSEN A/S, (441030), Peter Bangsvej 15, 7600 Struer, (DK), (Proprietor designated states: all)
Karsten, Nielsen, (2539980), Raevehojparken 19, 2.tv.,, 2800 Lyngby, (DK) , (Proprietor designated states: all)
INVENTOR:
KARSTEN, Nielsen, Raevehojparken 19, 2.tv., DK-2800 Lyngby, (DK)
LEGAL REPRESENTATIVE:
Ferkinghoff, Claes-Goran et al (22791), AWAPATENT AB, Sodra Hamngatan 37-41, P.O. Box 11394, 404 28 Goteborg, (SE)
PATENT (CC, No, Kind, Date): EP 935846 A2 990818 (Basic)
EP 935846 B1 031203
WO 98019391 980507
APPLICATION (CC, No, Date): EP 97910272 971031; WO 97DK497 971031
PRIORITY (CC, No, Date): DK 961214 961031
DESIGNATED STATES: AT; BE; CH; DE; DK; ES; FI; FR; GB; GR; IE; IT; LI; NL; PT; SE
RELATED DIVISIONAL NUMBER(S) - PN (AN):
(EP 2003013623)
INTERNATIONAL PATENT CLASS (V7): H03F-003/217
ABSTRACT WORD COUNT: 5459
NOTE:
No A-document published by EPO
LANGUAGE (Publication,Procedural,Application): English; English; English
FULLTEXT AVAILABILITY:

Available Text	Language	Update	Word Count
CLAIMS B	(English)	200349	507
CLAIMS B	(German)	200349	443
CLAIMS B	(French)	200349	569
SPEC B	(English)	200349	4625
Total word count - document A			0
Total word count - document B			6144
Total word count - documents A + B			6144

...SPECIFICATION poles in the local feedback or alternatively forward path. This improves distortion when carrier based **pulse width** modulation is used.
- Means for compensating for large scale power supply regulation, in order to...

...modulation, where the gain of modulator and power stage is dependent on the power supply **rail** level, meaning that the power supply perturbation may influence stability unless such **precautions** are taken.

DESCRIPTION OF THE FIRST EMBODIMENT
The enhanced cascade control method new to the...

7/3,K/3 (Item 1 from file: 349)

01181463 **Image available**

DIGITAL BACKPLANE
FACE ARRIERE NUMERIQUE

Patent Applicant/Assignee:
KAGUTECH LTD, 6425 Rockbluff Circle, Plano, Texas 75024, US, US (Residence), US (Nationality), (For all designated states except: US)
Patent Applicant/Inventor:
GUTTAG Karl, 6425 Rockbluff Circle, Plano, Texas 75024, US, US (Residence), US (Nationality), (Designated only for: US)
GUTTAG Alvin, 415 Russell Avenue #108, Gaithersburg, Maryland 20877, US, US (Residence), US (Nationality), (Designated only for: US)
Legal Representative:
JAGTIANI Ajay (agent), 10363-A Democracy Lane, Fairfax, Virginia 22030, US,

Patent and Priority Information (Country, Number, Date):
Patent: WO 2004104790 A2-A3 20041202 (WO 04104790)
Application: WO 2004US15877 20040520 (PCT/WO US04015877)
Priority Application: US 2003471731 20030520; US 2004568253 20040506
Designated States:
(All protection types applied unless otherwise stated - for applications 2004+)
AE AG AL AM AT AU AZ BA BB BG BR BW BY BZ CA CH CN CO CR CU CZ DE DK DM DZ EC EE EG ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NA NI NO NZ OM PG PH PL PT RO RU SC SD SE SG SK SL SY TJ TM TN TR TT TZ UA UG US UZ VC VN YU ZA ZM ZW
(EP) AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IT LU MC NL PL PT RO SE SI SK TR
(OA) BF BJ CF CG CI CM GA GN GQ GW ML MR NE SN TD TG
(AP) BW GH GM KE LS MW MZ NA SD SL SZ TZ UG ZM ZW
(EA) AM AZ BY KG KZ MD RU TJ TM
Publication Language: English
Filing Language: English
Fulltext Word Count: 54737

Fulltext Availability:
Detailed Description
Claims

Detailed Description
... electrode for controlling a light modulating element of an array of light modulating elements; and **recursive feedback** control means for controlling at least one **pulse width** using **recursive feedback** , the **pulse width** driving the electrode means.
[101 According to a second broad aspect of present invention, there...

...one ulse width using
p
recursive feedback; and (b) driving an electrode means using the **pulse width** to thereby **control** a light modulating element of an array of light modulating elements.

[111 According to a...

...of present invention, there is provided a system comprising: means for controlling at least one **pulse width** using **recursive feedback** ; and means for driving an electrode means using the **pulse width** to thereby **control** a light modulating element of an array of light modulating elements.

[121 According to a...

...broad aspect of present invention, there is provided a method comprising: controlling at least one **pulse width** using a **recursive feedback** process; and controlling an array of electrodes using the at least one **pulse width** , wherein the **recursive feedback** process is performed using bit serial processing.

[23] According to a fifteenth broad aspect of present invention, there is provided a system comprising: means controlling at least one **pulse width** using a **recursive feedback** process; and means for controlling an array of electrodes using the at least one **pulse width** , wherein the **recursive feedback** process is performed using bit serial processing.

[241 According to a sixteenth broad aspect of...

...data on a backplane.

[1061 For the purposes of the present invention, the term "deductive **pulse width control** " refers to method for controlling a pulse wherein only some of the bits of a pixel's value bits need to be looked at on most **cycles** . Such a deductive **pulse width control** may be made possible by the **recursive feedback** support. An example of deductive **pulse width control** is ...backplane, the bandwidth to the backplane and inside the backplane, and processing hardware when generating **pulse width** modulated signats on the display electrodes. (1781 The general concept of digital LCoS devices has...backplane, the bandwidth to the backplane and inside the backplane, and processing hardware when generating **pulse width** modulated signals on display electrodes.

[1921 Furthermore in one embodiment of the present invention, rather... involves operations on varying numbers of bit to be required for each stage of the **pulse width** determination. Also, where a **recursive feedback** method may employed. The **recursive feedback** method may employ: deductive comparisons, dual count method, and/or a bit serial operation. Memory...

...of a pixel's value when making a determination of the next state of a **pulse width** .

[535] In one embodiment, the present invention provides a display backplane with an array of...

Claim

... array of light modulating elements; and
recursive feedback control means for controlling at least one **pulse ' width** using **recursive feedback** , said **pulse width** driving said electrode means.

2 The device of claim 1, wherein said recursive feedback is...

...device include a plurality of pixel value bits for controlling a pixel value of said **pulse width** and wherein said **recursive feedback** control means only uses some of said pixel value bits to determine a next state of said **pulse width** .

14 The device of claim 1, further comprising a visual display apparatus including said array...

...apparatus is damaged.

16 A method comprising the following steps:
(a) controlling at least one **pulse width** using **recursive feedback** ; and
(b) driving an electrode means using said **pulse width** to thereby **control** a light modulating element of an array of light modulating elements.

17 The method of...

...implemented in a computer system.

30 A system comprising:
means for controlling at least one **pulse width** using **recursive feedback** ; and means for driving an electrode means using said **pulse width** to thereby **control** a light modulating element of an array of light modulating elements.

31 A device comprising...

...instructions to control multiple data path elements.

86 A method comprising:
controlling at least one **pulse width** using a **recursive feedback** process; and controlling an array of electrodes using said at least one **pulse width** , wherein said **recursive feedback** process is performed using bit serial processing.

87 The method of claim 86, wherein said...

...arrays of bit serial processing elements.

89 A system comprising:
means controlling at least one **pulse width** using a **recursive feedback** process; and means for controlling an array of electrodes using said at least one **pulse width** , wherein said **recursive feedback** process is performed using bit serial processing.

90 A method comprising the following steps:
(a...

...device comprisinga backplane comprising an instruction memory for holding instructions for controlling at least one **pulse width** on each light modulating element of a spatial light modulator. 103. The device of claim...

...on said backplane said first group and said at least one second group to thereby **control** a **pulse width** of one or more light modulating elements, wherein said second group of bit positions is...

...said back-plane said first group and said at least one second group to thereby **control** a **pulse width** of one or more light modulating elements, wherein
118
. A method comprising:
storing a first...

...on said backplane said first group and said at least one summary bit to thereby **control** a **pulse width** of one or more light modulating elements, wherein said summary bit is stored for a...

...and said selected bit positions are selected based on a count step for controlling said **pulse width** .
130. A system comprising:
means for storing a first group of bit positions of a...

...on said backplane said first group and said at least one summary bit to thereby **control** a **pulse width** of one or more light modulating elements, wherein said summary bit is stored for a...
...wave form for each line of a two-dimensional array of drive bits using a **recursive feedback** process, wherein each drive bit in said array of drive bits is in an
initialized...

...wave forin for each line of a two-dimensional array of drive bits using a **recursive feedback** process, wherein each drive bit in said array of drive bits
is in an initialized...

...pixels to a first output pixel
value using a first time base to generate first **pulse width** ; and mapping said input pixel value to a second output pixel value using a second time base to generate a second **pulse width** to thereby reduce the worse case phase difference in adjacent pixels of a spatial light...

...pixels to a first output pixel value using a first time base to generate first **pulse width** ; and means for mapping said input pixel value to a second output pixel value -using a second time base to generate a second **pulse width** to thereby reduce the worse case phase difference in adjacent pixels of a spatial light...

7/3,K/4 (Item 2 from file: 349)
DIALOG(R)File 349:PCT FULLTEXT

00289574 **Image available**
INHALER HAVING AN ATTACHABLE DOSING MONITOR AND RECORDER
INHALATEUR A ELEMENT D'ENREGISTREMENT ET DE SURVEILLANCE DE DOSAGE ADAPTABLE
Patent Applicant/Assignee:
MEDTRAC TECHNOLOGIES INC,
Inventor(s):
WOLF James L,
SALLIS Daniel V,
Patent and Priority Information (Country, Number, Date):
Patent: WO 9507723 A1 19950323
Application: WO 94US10310 19940914 (PCT/WO US9410310)
Priority Application: US 93122128 19930916
Designated States:
(Protection type is "patent" unless otherwise stated - for applications prior to 2004)
AT BE CH DE DK ES FR GB GR IE IT LU MC NL PT SE
Publication Language: English
Fulltext Word Count: 8426

Fulltext Availability:
Claims

Claim

... via
electronic switch 840 and regulator 850, but in this case for the duration of **pulse width** 880. The clock and ram circuit 860 further functions to activate the OR circuitry 875...Current
limiting resistor 870 functions to complete LED indicator 865 circuit. Illumination 866 serves as **feedback** to the user of the electronic inhalant device 100 when optional display/alarm device 890...system enters into the flash LED/display/alarm state 915 over path 911 to provide **feedback** of the event to the user before entering back to the power off state 900...logging event to return to standby power off 900, This
later case is a zero **feedback** configuration which is desirable in "blind" testing patients to serve as medication dispensing behavior analysis.
Importantly, the teachings of the present invention provides **feedback** to the user as may be necessary. For example, device 100 having installed a placebo...
...the device and inhaling. The
flash LED/display/alarm. and sensor capability would indicate such **feedback** as; improper synchronization of inhaling and inhalant release, inhaling too slow or too fast, and...

...events indicated in time reference 882. Time 882 is a possible waveform indicating 3 valid **recursive** actuations of the electronic inhalant device 100, Note that each recovery peak 883a, 883b and...

7/3,K/5 (Item 3 from file: 349)
DIALOG(R)File 349:PCT FULLTEXT

00217928 **Image available**
ANALOGUE AND DIGITAL CONVERTORS
CONVERTISSEURS ANALOGIQUES/NUMERIQUES
Patent Applicant/Assignee:
B & W LOUDSPEAKERS LTD,
CRAVEN Peter Graham,
Inventor(s):
CRAVEN Peter Graham,
Patent and Priority Information (Country, Number, Date):
Patent: WO 9215153 A2 19920903
Application: WO 92GB312 19920221 (PCT/WO GB9200312)
Priority Application: GB 913777 19910222
Designated States:
(Protection type is "patent" unless otherwise stated - for applications prior to 2004)
AT BE CA CH DE DK ES FR GB GR IT JP KR LU MC NL SE US
Publication Language: English
Fulltext Word Count: 22891

Fulltext Availability:
Claims

Claim
... noise shaping advantage 18 bits
Total 24 bits

The noise introduced by intermodulation to the **pulse width** modulator 50 is reduced very substantially from about 2@ 13 ; it could be reduced by the **feedback** noise so the range is improved. However, at present, 49 megahertz is the highest commercially...

...considerably less effective, and the performance tends to converge towards that of a simple digital **pulse width** modulator. Equally, however, to avoid overloading the quantizer it is desirable to maintain at least...

...pair of modulators 100A. 100B each comprising respective quantizers 40Ar 40B (identical in each case), **pulse width** modulators 50A, 50B (giving pulses of complementary lengths) and non-linear **feedback** networks 30Af 30B (each specifically arranged to compensate the non-linearity of its associated **pulse width** modulator 50A. 50B). The outputs of the two **pulse width** modulators 50A. 50B are then combined in a differential stage 110 and the resulting signal is low pass filtered for output. Because each **pulse width** modulator 50A. 50B is compensated by corresponding non-linear **feedback** correction, the matching between the two **pulse width** modulators 50A, 50B is less critical then with the arrangement of Figure 4C.
PC]r carried by each output pulse and consequently, since the **pulse width** modulator bit timing is the speed limiting step, this permits either more quantizer levels or...

...not filter the quantizer noise but only the noise or non-linearity due to the **pulse width** modulator 50; this is desirable since the quantizer noise is, as stated above, reduced within...

...address line a signal comprising both the present and the just previous inputs to the **pulse width** modulator 50. The size of each look-up table is therefore increased; for sixteen quantizer...

...will have a significant effect).
Referring to Figure 20 it is known that noise shaping **feedback** around a quantizer can produce lock-up or limit-cycle effects, ...an input which in turn is connectable to a point in the circuit following the **pulse width** modulator and any other non linear components of the circuit, and is arranged to measure...

...output stages; any non linearity is caused by, for example, finite transition times in the **pulse width** modulator can be taken account of prior to use of the convertor. Equally, the input...64 x 48 kilohertz = 3.072 megahertz. The sampled analogue signal is fed to a **feedback** network

30 which may resemble any one of the networks shown in Figures 2A to...

...231.

In this embodiment of the invention, the digital to analogue convertor 241 comprises a **pulse width** (or other **pulse** edge or length type) modulator 242 receiving the coarsely digitized digital signal and generating a pulse of a corresponding length, In the example shown in Figure 22, the **pulse width** modulator 242 is followed by an integrator 243 which accumulates the output of the **pulse width** modulator 242 during each (oversampled) sampling interval and supplies a corresponding analogue output sample proportional...

...coarse analogue to digital convertor 340. The digital output is fed back ("a") through a **pulse width** modulator 342 to the subtraction node. The frequency response of the continuous time filter 334...

...its harmonics is small (to attenuate the substantial harmonics at this frequency due to the **pulse width** modulator 342).

The effect of the **feedback** in Figure 23 is essentially to substantially equalize the pulse modulator output with the analogue input. If the digital input to the **pulse width** modulator 342 corresponded exactly to its output, this would ensure that the digital output of...

...close to the analogue input. However, as discussed above, at length, the output of the **pulse width** modulator 342 ...distorted version of its input. One solution to this roblem would be p

to provide **feedback** around the **pulse width** modulator 342 exactly as discussed above with reference to embodiment 1. However, this is unnecessarily...

...up tables 382A - 382E provides the corrected digital output coarse A/D convertor 340.

The **pulse width** modulation described above, in which a **pulse width** modulator receives a digital input signal and generates a pulse of a corresponding length, has...

...itself variable). For this reason, the above noted non-linearity in the output of the **pulse width** modulator occurs.

However,, an analogue **pulse width** modulator such as a class D amplifier is often provided by generating a sawtooth wave...

...pulse represents and consequently the above type of non-linearity does not occur. Thus, the **pulse width** modulator is sampling at irregular intervals (skew sampling); in this context, referred to as .1natural...

...time systems tend by their nature to involve uniform

sampling, hitherto this method of reducing **pulse width** modulator non-linearity in digital to analogue or analogue to digital convertors could not be...

...filtered through the continuous time sample filter 334 is passed to a "natural sampler" and **pulse - width** modulator 321, comprising a sawtooth generator 322 (for example, an analogue integrator) generating a sawtooth...digital output 400, it need not be re-converted to an analogue signal within the **feedback** loop to the subtractor 331, However, a circuit 395 for scaling the magnitude of the...

...which occurs within the circuit of Figure 23, since the counter 401 is effectively a **pulse - width** modulator in reverse. It is therefore necessary to provide a correction circuit 382 comprising a...

...will therefore be seen that the circuit 540 acts both as a sampler and a **pulse width** modulator; since the sampling is approximately "natural" sampling, the output **pulse width** modulated wave form (which is ...to a subsquent analogue filter 60) has substantially less non-linearity than the quantizer and **pulse width** modulator arrangement of Figure 1. In a preferred example, the **pulse width** modulated output is fed back, via an inverse quantizer or multiplier 531A. to reduce the...

...all clocked at the bit clock rate; in the arrangement of Figure 12, only the **pulse width** modulator requires such a high rate.

FIFTH EMBODIMENT - DIGITAL POWER AMPLIFIER

Referring to Figure 26...

...at a digital input 510 and fed to a quantizer 540 via a non-linear **feedback** network 30, 80 of the type discussed above with reference to the first embodiment. The output of the quantizer 540 is then fed to a **pulse width** modulator 550. The output of the **pulse width** modulator 550 is supplied to the control terminal of a solid state switch 551 positioned...

...sample instants if edges of two adjacent pulses interact. In this embodiment, the non-linear **feedback** 80 within the network 30 may therefore be calculated to correct the error due to the switch 551 as well as that of the **pulse width** modulator 550, as discussed with reference to Figure 19.

The ...Figure 19.

SIXTH EMBODIMENT - PREDICTIVE CORRECTION

It is not possible, as stated above, to employ **feedback** without delay to correct a sample at the input to a **pulse width** modulator for the distortion that sample produces at the output of the **pulse width**

modulator; the correction must therefore be applied to the next and following samples.
In the structure of Figure 1, where the **pulse width** modulator 50 is preceded by a quantizer 40, accurate correction cannot be applied at the input to the **pulse width** modulator 50 since the signal at this point is relatively coarsely quantized. Correction must instead...

...of which is fed back to the noise shaping network 630 and forward to a **pulse width** modulator 650 as in Figure 1. Prior to being fed to the network 630, the...

...subtracted from the centre time sample S P so that it 0 represents only the **pulse width** modulator error. The look-up table outputs are then added into successive stages of a...

...other words, in this embodiment of the invention, instead of correcting the effect of the **pulse width** modulator non-linearity on the next and following samples, the correction is applied ...modulator 650. 1 5
At first sight this would appear to remove the need for **feedback** correction representing the pulse modulator error altogether. However, on closer examination this is not so...

...E as representing the output of the quantizer 640 (and hence the input to the **pulse width** modulator 650) was derived on the basis of the signal from the input 610. However...

...the subtractor 69 1 is therefore insufficient to effectively reduce the error due to the **pulse width** modulator 650 (although in some other applications, for example digital power amplifiers, where the quantizer noise amplitude is lower, the predictive correction may be sufficient to reduce the **pulse width** modulator error to an acceptable level). Accordingly, the **feedback** network 630 includes a plurality of non-linear look-up tables 782A, 782B? 782C, 782D...2 can then be subtracted from the filters and placed in a notional delay-free **feedback** loop; it will understood that this is not proposed as a practical circuit but merely...

...is, however, possible to replace the circuit 889, which includes the physically impossible delay free **feedback** paths, with a simple look-up table since for every input X to the circuit...the quantizer. Where this occurs, the quantizer response becomes non-linear and no amount of **feedback** or noise shaping can reduce the non-linearity.
When noise shaping is employed, the level...

...instability,
If the quantizer is permitted to have additional

levels (for which there is no **pulse width** modulator equivalent output) clipping may be performed after the quantizer output so that the error is not fed back. However, without **feedback** the error will include components in the signal band and consequently will be noticeable. Known...

...it follows
that had a positive quantizer error been added to the preceding sample, @,he **feedback** would produce a negative correction at the next sample which would tend to reduce the...

...fed back via the network 930 to
modify the subsequent quantizer inputs providing noise shaping **feedback** . The network 930 is similar to that shown in Figure 2C and correspondingly comprises a...
...by the control unit
945 to propagate back and effect the next sample, a first **feedback** path 935 (including the unavoidable one stage delay) is provided to the signal path subsequent...

...desired (as
is strongly preferred in the embodiments of the present invention) the complexity and **recursive** nature of the noise shaping filter means that it cannot be fed back to a...the type shown in Figure 1 are generally stable. However, introducing non-linearity within the **feedback** path as in the first embodiment of the present invention introduces a possibility that instability...the use of a control element (preferably a look up table) within a noise shaping **feedback** loop to prevent instability on, a sample by sample basis is applicable in many other...

...input
to the PWM and a preceding sample.
In the embodiment of Figure 27, the **pulse width** modulator non-linearity is corrected on the sample which will give rise to the error...

11/3,K/1 **(Item 1 from file: 348)**
DIALOG(R)File 348:EUROPEAN PATENTS

00485060
Palette devices selection of multiple pixel depths packing the entire width of the bus
Palettengerate mit Selektion von vielfachen die gesamte Busbreite enthaltenden Pixeltiefen
Dispositifs a palettes avec selection de profondeurs multiples de pixels comportant la largeur entiere du bus
PATENT ASSIGNEE:
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INVENTOR:
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Killebrew, Carrell R., Jr., 3034 Pasture Lane, Sugar Land, TX 77479, (US)
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LEGAL REPRESENTATIVE:
Nettleton, John Victor et al (34281), Abel & Imray Northumberland House 303-306 High Holborn, London, WC1V 7LH, (GB)
PATENT (CC, No, Kind, Date): EP 465102 A2 920108 (Basic)
EP 465102 A3 920527
EP 465102 B1 960103
APPLICATION (CC, No, Date): EP 91305765 910626;
PRIORITY (CC, No, Date): US 544775 900627; US 545421 900627; US 544774 900627; US 545422 900627
DESIGNATED STATES: DE; FR; GB; IT; NL
INTERNATIONAL PATENT CLASS (V7): G09G-001/28; G09G-005/06;
ABSTRACT WORD COUNT: 138

LANGUAGE (Publication,Procedural,Application): English; English; English
FULLTEXT AVAILABILITY:

Available Text	Language	Update	Word Count
CLAIMS A	(English)	EPABF1	1135
CLAIMS B	(English)	EPAB96	391
CLAIMS B	(German)	EPAB96	347
CLAIMS B	(French)	EPAB96	462
SPEC A	(English)	EPABF1	29746
SPEC B	(English)	EPAB96	30033
Total word count - document A			30884
Total word count - document B			31233
Total word count - documents A + B			62117

INVENTOR:
... US)
Guttag, Karl M ...

...SPECIFICATION Control console 4902 suitably consists of a keyboard, mouse or other imaging devices previously described. **LCD** or CRTdisplay 4903 would be used for providing information to the user. **Liquid Crystal Display** 4903, with ISP-and-memory 4900 and print assembly 4909 are connected by an image...

...SPECIFICATION 358 918 describes a color display system for a display device, such as one using **LCD** elements, that is capable of displaying only a restricted range, say 16, color values at...Control console 4902

suitably consists of a keyboard, mouse or other imaging devices previously described. **LCD** or CRT display 4903 would be used for providing information to the user. **LCD Liquid Crystal Display** 4903, with ISP-and-memory 4900 and print assembly 4909 are connected by an image...

11/3,K/2 (Item 2 from file: 348)
DIALOG(R)File 348:EUROPEAN PATENTS

00485059
Graphics systems, palettes and methods with combined video and shift clock control
Graphische Systeme, Paletten und Verfahren mit kombinierter Video- und Schiebetaktsignalsteuerung
Systemes graphiques, palettes et methodes avec commande combinee de video et d'horloge de decalage
PATENT ASSIGNEE:
TEXAS INSTRUMENTS INCORPORATED, (279070), 13500 North Central Expressway, Dallas Texas 75265, (US), (Proprietor designated states: all)
INVENTOR:
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Killebrew, Carrell R., Jr., 3034 Pasture Lane, Sugar Land, TX 77479, (US)
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Nettleton, John Victor et al (34281), Abel & Imray 20 Red Lion Street, London WC1R 4PQ, (GB)
PATENT (CC, No, Kind, Date): EP 463867 A2 920102 (Basic)
EP 463867 A3 930519
EP 463867 B1 991027
APPLICATION (CC, No, Date): EP 91305764 910626;
PRIORITY (CC, No, Date): US 545424 900627; US 546172 900627; US 544779 900627
DESIGNATED STATES: DE; FR; GB; IT; NL
INTERNATIONAL PATENT CLASS (V7): G06F-001/04; G09G-005/18
ABSTRACT WORD COUNT: 158
NOTE:
Figure number on first page: 1

LANGUAGE (Publication,Procedural,Application): English; English; English
FULLTEXT AVAILABILITY:

Available Text	Language	Update	Word Count
CLAIMS B	(English)	9943	994
CLAIMS B	(German)	9943	900
CLAIMS B	(French)	9943	1229
SPEC B	(English)	9943	29883
Total word count - document A			0
Total word count - document B			33006
Total word count - documents A + B			33006

INVENTOR:
Guttag, Karl M ...

...SPECIFICATION Control console 4902 suitably consists of a keyboard, mouse or other imaging devices previously described. **LCD** or CRT display 4903 would be used for providing information to the user. **LCD Liquid**

Crystal Display 4903, with ISP-and-memory 4900 and print assembly 4909 are connected by an image...

11/3,K/3 (Item 3 from file: 348)
DIALOG(R)File 348:EUROPEAN PATENTS
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00407399
Multiprocessor with crossbar between processors and memories
Multiprozessor mit Koordinatenschalter zwischen Prozessoren und Speichern
Multiprocesseur avec commutateur a coordonnees entre processeurs et memoires
PATENT ASSIGNEE:
TEXAS INSTRUMENTS INCORPORATED, (279070), 13500 North Central Expressway, Dallas Texas 75265, (US), (applicant designated states: DE;FR;GB;IT;NL)
INVENTOR:
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Guttag, Karl Marion , 4015 S. Sandy Court, Missouri City Texas 77459, (US
LEGAL REPRESENTATIVE:
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PATENT (CC, No, Kind, Date): EP 429733 A2 910605 (Basic)
EP 429733 A3 930303
EP 429733 B1 990428
APPLICATION (CC, No, Date): EP 89313252 891219;
PRIORITY (CC, No, Date): US 435591 891117
DESIGNATED STATES: DE; FR; GB; IT; NL
INTERNATIONAL PATENT CLASS (V7): G06F-015/16;
ABSTRACT WORD COUNT: 74

LANGUAGE (Publication,Procedural,Application): English; English; English
FULLTEXT AVAILABILITY:

Available Text	Language	Update	Word Count
CLAIMS B	(English)	9917	2266
CLAIMS B	(German)	9917	2091
CLAIMS B	(French)	9917	2436
SPEC B	(English)	9917	34787
Total word count - document A			0
Total word count - document B			41580
Total word count - documents A + B			41580

INVENTOR:
... GB)
Guttag, Karl Marion ...

...SPECIFICATION Control console 4902 could consist of a keyboard, mouse or other imaging devices previously described. **LCD** or CRT display 4903 would be used for providing

11/3,K/4 (Item 1 from file: 349)
DIALOG(R)File 349:PCT FULLTEXT
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00766837
METHOD AND SYSTEM FOR DISPLAYING INFORMATION USING A DISPLAY CHIP

PROCEDE ET SYSTEME PERMETTANT D'AFFICHER DES INFORMATIONS AU MOYEN D'UNE PUCE D'AFFICHAGE

Patent Applicant/Assignee:
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Legal Representative:
MEEK Kevin J, Baker Botts L.L.P., 2001 Ross Avenue, Dallas, TX 75201-2980 , US
Patent and Priority Information (Country, Number, Date):
Patent: WO 200079510 A1 20001228 (WO 0079510)
Application: WO 2000US17164 20000621 (PCT/WO US0017164)
Priority Application: US 99337411 19990621
Designated States:
(Protection type is "patent" unless otherwise stated - for applications prior to 2004)
AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CR CU CZ DE DK DM DZ EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NO NZ PL PT RO RU SD SE SG SI SK SL TJ TM TR TT TZ UA UG UZ VN YU ZA ZW
(EP) AT BE CH CY DE DK ES FI FR GB GR IE IT LU MC NL PT SE
(OA) BF BJ CF CG CI CM GA GN GW ML MR NE SN TD TG
(AP) GH GM KE LS MW MZ SD SL SZ TZ UG ZW
(EA) AM AZ BY KG KZ MD RU TJ TM
Publication Language: English
Filing Language: English
Fulltext Word Count: 7427

Inventor(s):
GUTTAG Karl M ...
Fulltext Availability:
Detailed Description
Claims

Detailed Description
... color sequential format to color bit sequential format; FIGURE 6 illustrates the operation of a **liquid crystal display** in accordance with the teachings of the present invention; FIGURE 7 illustrates a block diagram...an uncharged cell will stay at the same polarization. In the example of FIGURE 6, **LCD** device 42 is a reflective device having a reflective layer behind the liquid crystal cells...

...let only the light aligned in the same direction as that emerging from an active **liquid crystal display** cell to pass through. All other light is blocked. The passed light is the viewed...value back to the display to be displayed. This process is done to keep the **LCD** material from staying in one state. Other, more sophisticated processing is also possible.

FIGURE 10...

...logical one or zero. As
discussed earlier, depending on the value of the bit,
the **LCD** pixel will either polarize the incoming light
or leave it unchanged. This has the effect...

...to
pixel 96. The inverse of a displayed bit needs to be
displayed because most **LCD** materials require T1 DC

3 5 restoration" which mean the average DC value must be
near zero on the cell to prevent the **LCD** material from
staying in a twisted state. In other embodiments,
logic arrangement can process bits...of
the appending claims. For example, while exemplary
3 5 discussions involved the use of **LCD** devices, digital
mirror devices can also be used as a display device.

Additionally, while the...

Claim
... memory bits per pixel.
The system of Claim 1, wherein the display
array is a **liquid crystal display** chip.

9 The system of claim 1 wherein the display
array is mounted in a...

...after being loaded.

18 The method of Claim 17, wherein the display
chip is a **liquid crystal display** chip.

19 The method of Claim 17, further comprising
nonvolatile memory coupled to the controller...rlost pixel)msb-1 ...
FIG. 5
RGB LINEAR
ILLUMINATOR POLARIZER
PASSES S/ BEAMSPLITTER
RETARDS P **LCD**
P 39 DEVICE **LCD** ON-S IS
S S ROTATED TO P
=Wam.
AND REFLECTED
P 43
s
S **LCD** OFF-S IS
REFLECTED AND
P S REMAINS S
@7
42
40 ip LINEAR POLARIZING.

File 9:Business & Industry(R) Jul/1994-2006/Feb 07
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File 15:ABI/Inform(R) 1971-2006/Feb 08
(c) 2006 ProQuest Info&Learning
File 16:Gale Group PROMT(R) 1990-2006/Feb 06
(c) 2006 The Gale Group
File 20:Dialog Global Reporter 1997-2006/Feb 08
(c) 2006 Dialog
File 47:Gale Group Magazine DB(TM) 1959-2006/Feb 07
(c) 2006 The Gale group
File 75:TGG Management Contents(R) 86-2006/Jan W4
(c) 2006 The Gale Group
File 80:TGG Aerospace/Def.Mkts(R) 1982-2006/Feb 07
(c) 2006 The Gale Group
File 88:Gale Group Business A.R.T.S. 1976-2006/Feb 02
(c) 2006 The Gale Group
File 98:General Sci Abs/Full-Text 1984-2004/Dec
(c) 2005 The HW Wilson Co.
File 112:UBM Industry News 1998-2004/Jan 27
(c) 2004 United Business Media
File 141:Readers Guide 1983-2004/Dec
(c) 2005 The HW Wilson Co
File 148:Gale Group Trade & Industry DB 1976-2006/Feb 07
(c)2006 The Gale Group
File 160:Gale Group PROMT(R) 1972-1989
(c) 1999 The Gale Group
File 275:Gale Group Computer DB(TM) 1983-2006/Feb 07
(c) 2006 The Gale Group
File 264:DIALOG Defense Newsletters 1989-2006/Feb 07
(c) 2006 Dialog
File 484:Periodical Abs Plustext 1986-2006/Feb W1
(c) 2006 ProQuest
File 553:Wilson Bus. Abs. FullText 1982-2004/Dec
(c) 2005 The HW Wilson Co
File 570:Gale Group MARS(R) 1984-2006/Feb 07
(c) 2006 The Gale Group
File 608:KR/T Bus.News. 1992-2006/Feb 08
(c)2006 Knight Ridder/Tribune Bus News
File 620:EIU:Viewswire 2005/Oct 19
(c) 2005 Economist Intelligence Unit
File 613:PR Newswire 1999-2006/Feb 08
(c) 2006 PR Newswire Association Inc
File 621:Gale Group New Prod.Annou.(R) 1985-2006/Feb 07
(c) 2006 The Gale Group
File 623:Business Week 1985-2006/Feb 08
(c) 2006 The McGraw-Hill Companies Inc
File 624:McGraw-Hill Publications 1985-2006/Feb 08
(c) 2006 McGraw-Hill Co. Inc
File 634:San Jose Mercury Jun 1985-2006/Feb 07
(c) 2006 San Jose Mercury News
File 635:Business Dateline(R) 1985-2006/Feb 08
(c) 2006 ProQuest Info&Learning
File 636:Gale Group Newsletter DB(TM) 1987-2006/Feb 07
(c) 2006 The Gale Group
File 647:CMP Computer Fulltext 1988-2006/Feb W3
(c) 2006 CMP Media, LLC
File 696:DIALOG Telecom. Newsletters 1995-2006/Feb 08
(c) 2006 Dialog
File 674:Computer News Fulltext 1989-2005/Oct W2
(c) 2005 IDG Communications
File 810:Business Wire 1986-1999/Feb 28

File 813:PR Newswire 1987-1999/Apr 30

File 587:Jane`s Defense&Aerospace 2006/Feb W1

Set	Items	Description
S1	390	RECURSIVE(S)FEEDBACK
S2	15586	(CHANG??? OR CONTROL? OR VARIABLE OR FLUCTUATES OR INCONSISTENT OR RANDOM OR VACILLAT???? OR SWINGS OR OSCILLAT? OR CYCLE?? OR CYCLIC? OR INTERMITTENT OR PERIOD? OR PULSE?? OR ALTERNAT? OR PULSAT? OR REPEAT?)(3N)(PULSE()WIDTH)
S3	419601	ELECTRODE?? OR LCD OR LIQUID()CRYSTAL()DISPLAY?? OR LCOS OR LIGHT()MODULAT?
S4	31275	(COLOR OR RGB OR RED OR GREEN OR BLUE OR GRAY OR GRAY()SCALE OR BRIGHTNESS)(3N)S3
S5	48	AU=(GUTTAG, K? OR GUTTAG K? OR GUTTAG, A? OR GUTTAG A?)
S6	1	S1(S)S2
S7	0	S1(3N)S2
S8	0	S1(3N)S3
S9	0	S1(3N)S4
S10	0	S1(3N)(PULSE()WIDTH)
S11	43	S2(3N)(S3 OR S4)
S12	28	RD (unique items)
S13	26	S12 NOT PY>2003
S14	0	S13(3N)FEED()BACK()LOOP??
S15	0	S13(3N)FEEDBACK
S16	0	S13 AND S5
S17	2	S5 AND (S1:S4)
S18	1	RD (unique items)
S19	1	S18 NOT S6

6/3,K/1 **(Item 1 from file: 88)**
DIALOG(R)File 88:Gale Group Business A.R.T.S.

04047100 SUPPLIER NUMBER: 18689293
Knowledge-based parameter estimation for identification and equalization of storage channels.
Shafiee, Hamid; Moon, Jaekyun
IEEE Transactions on Magnetics, v32, n4, p3274(9)
July, 1996
ISSN: 0018-9464 LANGUAGE: English RECORD TYPE: Abstract

...AUTHOR ABSTRACT: the channel identification problem is reduced to estimation of one or more parameters. Specifically, the **pulse width** at half of the transition response peak magnitude is first estimated. The algorithm is then...

...set of equalizer coefficients or to modify the decoder parameters. We will describe methods for **recursive** filter design based on the estimated channel for partial response as well as decision **feedback** systems.

19/3,K/1 (Item 1 from file: 148)
DIALOG(R)File 148:Gale Group Trade & Industry DB

06399652 SUPPLIER NUMBER: 13444716 (USE FORMAT 7 OR 9 FOR FULL TEXT)
Next-generation apps will push display technology to the limit. (1993 Technology Forecast: Next-Generation Video) (Technical)
Guttag, Karl
Electronic Design, v41, n1, p102(4)
Jan 7, 1993
DOCUMENT TYPE: Technical ISSN: 0013-4872 LANGUAGE: ENGLISH
RECORD TYPE: FULLTEXT; ABSTRACT
WORD COUNT: 2922 LINE COUNT: 00238

Guttag, Karl

10849195_CLSTITLES1

Titles of Most Frequently Occurring Classifications of Patents Returned From A Search of 10849195 on February 08, 2006

6 345/89 (3 OR, 3 XR)
Class 345 : COMPUTER GRAPHICS PROCESSING, OPERATOR INTERFACE PROCESSING, AND SELECTIVE VISUAL DISPLAY SYSTEMS
345/30 PLURAL PHYSICAL DISPLAY ELEMENT CONTROL SYSTEM (E.G., NON-CRT)
345/55 .Display elements arranged in matrix (e.g., rows and columns)
345/84 ..Light-controlling display elements
345/87 ...Liquid crystal display elements (LCD)
345/89 ....Gray scale capability (e.g., halftone)

6 349/117 (0 OR, 6 XR)
Class 349 : LIQUID CRYSTAL CELLS, ELEMENTS AND SYSTEMS
349/56 PARTICULAR STRUCTURE
349/84 .Having significant detail of cell structure only

349/117 ..Compensator or retarder (i.e., not using liquid crystal cell)

6 349/25 (6 OR, 0 XR)
Class 349 : LIQUID CRYSTAL CELLS, ELEMENTS AND SYSTEMS
349/19 PARTICULAR EXCITATION OF LIQUID CRYSTAL
349/24 .Optical excitation
349/25 ..With photoconductive layer (e.g., spatial light modulator(SLMs))

5 349/9 (0 OR, 5 XR)
Class 349 : LIQUID CRYSTAL CELLS, ELEMENTS AND SYSTEMS
349/1 LIQUID CRYSTAL SYSTEM
349/5 .Projector including liquid crystal cell (s)
349/8 ..Plural light path projectors
349/9 ...Having light separated into S and P polarization

4 341/143 (3 OR, 1 XR)
Class 341 : CODED DATA GENERATION OR CONVERSION
341/126 ANALOG TO OR FROM DIGITAL CONVERSION
341/143 .Differential encoder

and/or decoder (e.g., delta modulation, differential pulse code modulation)

4 349/100 (0 OR, 4 XR)
Class 349 : LIQUID CRYSTAL CELLS, ELEMENTS AND SYSTEMS
349/56 PARTICULAR STRUCTURE
349/84 .Having significant detail of cell structure only
349/96 ..Polarizer
349/99 ...With particular non-zero angle between polarization axis and orientation direction
349/100 ....For ferroelectric liquid crystal

4 349/96 (0 OR, 4 XR)
Class 349 : LIQUID CRYSTAL CELLS, ELEMENTS AND SYSTEMS
349/56 PARTICULAR STRUCTURE
349/84 .Having significant detail of cell structure only
349/96 ..Polarizer

4 372/31 (1 OR, 3 XR)
Class 372 : COHERENT LIGHT GENERATORS
372/9 PARTICULAR BEAM CONTROL DEVICE
372/29.02 .Optical output

stabilization
372/31 ..Amplitude

4 385/14 (1 OR, 3 XR)
Class 385 : OPTICAL WAVEGUIDES
385/14 INTEGRATED OPTICAL CIRCUIT

4 398/1 (1 OR, 3 XR)
Class 398 : OPTICAL COMMUNICATIONS
398/1 FAULT RECOVERY

4 725/106 (3 OR, 1 XR)
Class 725 : INTERACTIVE VIDEO DISTRIBUTION SYSTEMS
725/105 VIDEO DISTRIBUTION SYSTEM WITH UPSTREAM COMMUNICATION
725/106 .Telephony via television distribution network

3 345/692 (0 OR, 3 XR)
Class 345 : COMPUTER GRAPHICS PROCESSING, OPERATOR INTERFACE PROCESSING, AND SELECTIVE VISUAL DISPLAY SYSTEMS
345/204 DISPLAY DRIVING CONTROL CIRCUITRY
345/690 .Intensity or color driving control (e.g., gray scale)

345/691 ..Temporal processing (e.g., pulse width variation over time

345/692 ...Binary weighted

3 345/87 (0 OR, 3 XR)

Class 345 : COMPUTER GRAPHICS PROCESSING, OPERATOR INTERFACE PROCESSING, AND SELECTIVE VISUAL DISPLAY SYSTEMS

345/30 PLURAL PHYSICAL DISPLAY ELEMENT CONTROL SYSTEM (E.G., NON-CRT)

345/55 .Display elements arranged in matrix (e.g., rows and columns)

345/84 ..Light-controlling display elements

345/87 ...Liquid crystal display elements (LCD)

3 349/172 (0 OR, 3 XR)

Class 349 : LIQUID CRYSTAL CELLS, ELEMENTS AND SYSTEMS

349/167 WITH SPECIFIED NONCHEMICAL CHARACTERISTIC OF LIQUID CRYSTAL MATERIAL

349/171 .Within smectic phase

349/172 ..Within chiral smectic phase (includes

ferroelectric)

3 370/342 (0 OR, 3 XR)
Class 370 : MULTIPLEX COMMUNICATIONS
370/310 COMMUNICATION OVER FREE SPACE
370/342 .Combining or distributing information via code word channels using multiple access techniques (e.g., CDMA)

3 370/474 (0 OR, 3 XR)
Class 370 : MULTIPLEX COMMUNICATIONS
370/473 ..Transmission of a single message having multiple packets
370/474 .Assembly or disassembly of messages having address headers

3 372/25 (1 OR, 2 XR)
Class 372 : COHERENT LIGHT GENERATORS
372/9 PARTICULAR BEAM CONTROL DEVICE
372/25 .Control of pulse characteristics

3 372/26 (1 OR, 2 XR)
Class 372 : COHERENT LIGHT GENERATORS

372/9 PARTICULAR BEAM CONTROL DEVICE
372/26 .Modulation

3 372/28 (0 OR, 3 XR)
Class 372 : COHERENT LIGHT GENERATORS
372/9 PARTICULAR BEAM CONTROL DEVICE
372/26 .Modulation
372/28 ..Frequency

3 398/187 (0 OR, 3 XR)
Class 398 : OPTICAL COMMUNICATIONS
398/182 TRANSMITTER
398/183 .Having particular modulation
398/187 ..Frequency modulation

3 398/201 (0 OR, 3 XR)
Class 398 : OPTICAL COMMUNICATIONS
398/182 TRANSMITTER
398/201 .Including specific optical elements

2 250/551 (1 OR, 1 XR)
Class 250 : RADIANT ENERGY
250/200 PHOTOCELLS; CIRCUITS AND APPARATUS
250/551 .Signal isolator

2 345/102 (0 OR, 2 XR)
Class 345 : COMPUTER GRAPHICS PROCESSING, OPERATOR INTERFACE PROCESSING, AND SELECTIVE VISUAL DISPLAY SYSTEMS
345/30 PLURAL PHYSICAL DISPLAY ELEMENT CONTROL SYSTEM (E.G., NON-CRT)
345/55 .Display elements arranged in matrix (e.g., rows and columns)
345/84 ..Light-controlling display elements
345/87 ...Liquid crystal display elements (LCD)
345/102 ....Backlight control

2 345/690 (2 OR, 0 XR)
Class 345 : COMPUTER GRAPHICS PROCESSING, OPERATOR INTERFACE PROCESSING, AND SELECTIVE VISUAL DISPLAY SYSTEMS
345/204 DISPLAY DRIVING CONTROL CIRCUITRY
345/690 .Intensity or color driving control (e.g., gray scale)

2 345/85 (2 OR, 0 XR)
Class 345 : COMPUTER GRAPHICS

PROCESSING, OPERATOR
INTERFACE
PROCESSING, AND SELECTIVE VISUAL DISPLAY
SYSTEMS
345/30 PLURAL PHYSICAL
DISPLAY ELEMENT CONTROL SYSTEM
(E.G., NON-CRT)
345/55 .Display elements
arranged in matrix (e.g.,
rows and columns)

345/84 ..Light-controlling
display elements
345/85 ...Electroscopic
(e.g., movable electrodes or
electrostatic
elements)

2 345/88 (1 OR, 1 XR)
Class 345 : COMPUTER GRAPHICS
PROCESSING, OPERATOR
INTERFACE
PROCESSING, AND SELECTIVE VISUAL DISPLAY
SYSTEMS
345/30 PLURAL PHYSICAL
DISPLAY ELEMENT CONTROL SYSTEM
(E.G., NON-CRT)

345/55 .Display elements
arranged in matrix (e.g.,
rows and
columns)
345/84 ..Light-controlling
display elements

345/87 ...Liquid crystal display elements (LCD)
345/88 ....Color

2 347/131 (1 OR, 1 XR)
Class 347 : INCREMENTAL PRINTING OF SYMBOLIC INFORMATION

347/111 ELECTRIC MARKING APPARATUS OR PROCESSES
347/112 .Electrostatic
347/129 ..Photo scanning
347/131 ...Dot density or dot size control (e.g., halftone)

2 347/132 (0 OR, 2 XR)
Class 347 : INCREMENTAL PRINTING OF SYMBOLIC INFORMATION

347/111 ELECTRIC MARKING APPARATUS OR PROCESSES
347/112 .Electrostatic
347/129 ..Photo scanning
347/132 ...Beam generator driving means

2 347/136 (0 OR, 2 XR)
Class 347 : INCREMENTAL PRINTING OF SYMBOLIC INFORMATION

347/111 ELECTRIC MARKING APPARATUS OR PROCESSES
347/112 .Electrostatic

347/129 ..Photo scanning
347/134 ...Optical elements interposed between record receiver and beam generator
347/135 ....Light intensity modulation means
347/136 .....Shutter device

2 347/255 (0 OR, 2 XR)
Class 347 : INCREMENTAL PRINTING OF SYMBOLIC INFORMATION

347/224 LIGHT OR BEAM MARKING APPARATUS OR PROCESSES
347/225 .Scan of light
347/255 ..Specific light modulator

2 349/159 (0 OR, 2 XR)
Class 349 : LIQUID CRYSTAL CELLS, ELEMENTS AND SYSTEMS
349/56 PARTICULAR STRUCTURE
349/84 .Having significant detail of cell structure only
349/158 ..Substrate
349/159 ...Fiberoptic faceplate

2 349/71 (1 OR, 1 XR)
Class 349 : LIQUID CRYSTAL CELLS, ELEMENTS AND SYSTEMS
349/56 PARTICULAR STRUCTURE

349/61 .Particular illumination
349/70 ..Fluorescent light source
349/71 ...Formed of planar phosphor or fluorescent layer separate from illumination source

2 370/458 (1 OR, 1 XR)
Class 370 : MULTIPLEX COMMUNICATIONS
370/431 CHANNEL ASSIGNMENT TECHNIQUES
370/458 .Using time slots

2 372/27 (0 OR, 2 XR)
Class 372 : COHERENT LIGHT GENERATORS
372/9 PARTICULAR BEAM CONTROL DEVICE
372/26 .Modulation
372/27 ..Polarization

2 372/29.021 (1 OR, 1 XR)
Class 372 : COHERENT LIGHT GENERATORS
372/9 PARTICULAR BEAM CONTROL DEVICE
372/29.02 .Optical output stabilization
372/29.021 ..Power

2 372/46.01 (0 OR, 2 XR)

Class 372 : COHERENT LIGHT GENERATORS
Could not find subclass title.

2 372/50.11 (0 OR, 2 XR)
Class 372 : COHERENT LIGHT GENERATORS
Could not find subclass title.

2 372/6 (0 OR, 2 XR)
Class 372 : COHERENT LIGHT GENERATORS
372/6 OPTICAL FIBER LASER

2 372/96 (2 OR, 0 XR)
Class 372 : COHERENT LIGHT GENERATORS
372/92 PARTICULAR RESONANT CAVITY
372/96 .Distributed feedback

2 375/142 (2 OR, 0 XR)
Class 375 : PULSE OR DIGITAL COMMUNICATIONS
375/130 SPREAD SPECTRUM
375/140 .Direct sequence
375/141 ..End-to-end transmission system
375/142 ...Having correlation-type receiver

2 375/238 (0 OR, 2 XR)
Class 375 : PULSE OR DIGITAL COMMUNICATIONS

375/238 PULSE WIDTH MODULATION

2 375/242 (1 OR, 1 XR)
Class 375 : PULSE OR DIGITAL COMMUNICATIONS
375/242 PULSE CODE MODULATION

2 375/260 (0 OR, 2 XR)
Class 375 : PULSE OR DIGITAL COMMUNICATIONS
375/259 SYSTEMS USING ALTERNATING OR PULSATING CURRENT

375/260 .Plural channels for transmission of a single pulse train

2 375/376 (0 OR, 2 XR)
Class 375 : PULSE OR DIGITAL COMMUNICATIONS
375/354 SYNCHRONIZERS
375/371 .Phase displacement, slip or jitter correction

375/373 ..Phase locking
375/376 ...Phase locked loop

2 380/214 (2 OR, 0 XR)
Class 380 : CRYPTOGRAPHY
380/200 VIDEO CRYPTOGRAPHY
380/210 .Video electric signal modification (e.g., scrambling)

380/214 ..Nonstandard scan pattern of video information

2 380/245 (0 OR, 2 XR)
Class 380 : CRYPTOGRAPHY
380/243 FACSIMILE CRYPTOGRAPHY

380/245 .Nonstandard scan pattern

2 385/16 (2 OR, 0 XR)
Class 385 : OPTICAL WAVEGUIDES
385/15 WITH OPTICAL COUPLER
385/16 .Switch (i.e., switching from one terminal to another, not modulation)

2 385/2 (1 OR, 1 XR)
Class 385 : OPTICAL WAVEGUIDES
385/1 TEMPORAL OPTICAL MODULATION WITHIN AN OPTICAL WAVEGUIDE
385/2 .Electro-optic

2 385/24 (0 OR, 2 XR)
Class 385 : OPTICAL WAVEGUIDES
385/15 WITH OPTICAL COUPLER
385/24 .Plural (e.g., data bus)

2 398/156 (0 OR, 2 XR)
Class 398 : OPTICAL

COMMUNICATIONS
398/140 TRANSMITTER AND RECEIVER SYSTEM
398/156 .Including alignment between transmitter and receiver

2 398/164 (2 OR, 0 XR)
Class 398 : OPTICAL COMMUNICATIONS
398/140 TRANSMITTER AND RECEIVER SYSTEM
398/164 .Including optical circuit board

2 398/185 (2 OR, 0 XR)
Class 398 : OPTICAL COMMUNICATIONS
398/182 TRANSMITTER
398/183 .Having particular modulation
398/185 ..Hybrid modulation

2 398/188 (0 OR, 2 XR)
Class 398 : OPTICAL COMMUNICATIONS
398/182 TRANSMITTER
398/183 .Having particular modulation
398/188 ..Phase modulation

2 398/191 (2 OR, 0 XR)
Class 398 : OPTICAL COMMUNICATIONS

398/182 TRANSMITTER
398/183 .Having particular modulation
398/189 ..Pulse modulation
398/191 ...Pulse time

2 398/195 (1 OR, 1 XR)
Class 398 : OPTICAL COMMUNICATIONS
398/182 TRANSMITTER
398/192 .Including compensation
398/195 ..Including feedback

2 398/197 (1 OR, 1 XR)
Class 398 : OPTICAL COMMUNICATIONS
398/182 TRANSMITTER
398/192 .Including compensation
398/195 ..Including feedback
398/197 ...For power control

2 398/48 (1 OR, 1 XR)
Class 398 : OPTICAL COMMUNICATIONS
398/43 MULTIPLEX
398/45 .Optical switching
398/48 ..Wavelength

2 398/76 (1 OR, 1 XR)
Class 398 : OPTICAL COMMUNICATIONS
398/43 MULTIPLEX

398/76 .Subcarrier multiplexing

2 455/562.1 (0 OR, 2 XR)
Class 455 : TELECOMMUNICATIONS
455/73 TRANSMITTER AND RECEIVER AT SAME STATION (E.G., TRANSCEIVER)
455/550.1 .Radiotelephone equipment detail
455/561 ..Base station detail
455/562.1 ...Having specific antenna arrangement

2 714/776 (1 OR, 1 XR)
Class 714 : ERROR DETECTION/CORRECTION AND FAULT DETECTION/RECOVERY
714/699 PULSE OR DATA ERROR HANDLING
714/746 .Digital data error correction
714/752 ..Forward correction by block code
714/776 ...For packet or frame multiplexed data

```
File   2:INSPEC 1898-2006/Jan W3
         (c) 2006 Institution of Electrical Engineers
File   6:NTIS 1964-2006/Jan W5
         (c) 2006 NTIS, Intl Cpyrght All Rights Res
File   8:Ei Compendex(R) 1970-2006/Jan W5
         (c) 2006 Elsevier Eng.  Info. Inc.
File  34:SciSearch(R) Cited Ref Sci 1990-2006/Feb W1
         (c) 2006 Inst for Sci Info
File  35:Dissertation Abs Online 1861-2006/Jan
         (c) 2006 ProQuest Info&Learning
File  56:Computer and Information Systems Abstracts 1966-2006/Jan
         (c) 2006 CSA.
File  57:Electronics & Communications Abstracts 1966-2006/Jan
         (c) 2006 CSA.
File  65:Inside Conferences 1993-2006/Feb W1
         (c) 2006 BLDSC all rts. reserv.
File  94:JICST-EPlus 1985-2006/Nov W4
         (c)2006 Japan Science and Tech Corp(JST)
File  95:TEME-Technology & Management 1989-2006/Feb W1
         (c) 2006 FIZ TECHNIK
File  99:Wilson Appl. Sci & Tech Abs 1983-2006/Jan
         (c) 2006 The HW Wilson Co.
File 144:Pascal 1973-2006/Jan W3
         (c) 2006 INIST/CNRS
File 239:Mathsci 1940-2006/Mar
         (c) 2006 American Mathematical Society
File 256:TECINFOSOURCE 82-2005/DEC
         (c) 2006 INFO.SOURCES INC
File 434:SciSearch(R) Cited Ref Sci 1974-1989/Dec
         (c) 1998 Inst for Sci Info
File 583:Gale Group Globalbase(TM) 1986-2002/Dec 13
         (c) 2002 The Gale Group
File 603:Newspaper Abstracts 1984-1988
         (c)2001 ProQuest Info&Learning
File 483:Newspaper Abs Daily 1986-2006/Feb 04
         (c) 2006 ProQuest Info&Learning
File 248:PIRA 1975-2006/Jan W3
         (c) 2006 Pira International

Set     Items   Description
S1    3895636   PIXEL? OR PEL OR (PICTURE OR PIXEL?)()ELEMENT?? OR IMAGE OR
               MOVING()IMAGE?? OR PICTURE? OR PHOTO OR PHOTOS OR PHOTOGRAPH-
              ?? OR VIDEO?? OR VIDEO(3N)DATA OR MOVIE?? OR GRAPHIC?? OR  JP-
              EG OR GIF OR MPEG
S2        891   (MUX OR (BALANC??? OR FLIP(3N)FLOP)()CIRCUIT? OR DECODER??
              OR DRIVER?? OR LATCH)(10N)MIRROR??
S3        149   (BACK(3N)(PLANE?? OR PLATE??) OR BACKPLATE?? OR BACKPLANE?-
              ?)(3N)CONTROL?
S4       6148   ELECTRODE??(10N)MODULAT?
S5    1709821   DISPLAY?? OR MONITOR?? OR PANEL OR LCD OR LCOS LIQUID()CRY-
              STAL()(DISPLAY OR ON()SILICON)
S6         98   AU=(GUTTAG, K? OR GUTTAG K? OR GUTTAG, A? OR GUTTAG A?)
S7      53590   PULSE()WIDTH
S8       9343   (RECURSIVE OR ALGORITHM? OR PROGRAM?? OR ROUTINE??)(3N)(FEE-
              DBACK?? OR FEED()BACK)
S9         27   S1(3N)S2
S10         0   S9(3N)S3
S11         0   S9 AND S3
S12         0   S9(3N)S4
S13         0   S9 AND S4
S14         5   S9(3N)S5
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S15          0   (S9 OR S14)(3N)(S6:S8)
S16          0   (S9 OR S14) AND (S6:S8)
S17          3   RD S14  (unique items)
S18          0   S3(3N)S4
S19          0   S3 AND S4
S20          0   S2(3N)S3
S21          0   S2 AND S3
S22          4   S3(3N)S5
S23          0   S22 AND (S6:S8)
S24          4   RD S22  (unique items)
S25          0   S7(3N)S8
S26         34   S7 AND S8
S27         22   RD  (unique items)
S28          0   S27(3N)(S1:S6)
S29          2   S27 AND (S1:S6)
S30          2   S29 NOT (S17 OR S24)
S31          0   S27 AND (RECURSIVE()FEEDBACK)
S32         12   S27 NOT (KNOWLEDG()BASED OR MOTOR OR POWER()SUPPLY OR X()R-
                 AY OR ROBOT OR POLE()PLACEMENT OR GENETIC)
S33         10   S32 NOT (S17 OR S24 OR S30)
S34          8   S33 NOT PY>2003
S35         17   S7(S)S8
S36         12   S35 NOT (S17 OR S24 OR S30 OR S33)
S37          6   RD  (unique items)
S38          2   S37 NOT (KNOWLEDG()BASED OR MOTOR OR POWER()SUPPLY OR X()R-
                 AY OR ROBOT OR POLE()PLACEMENT OR GENETIC)
S39         61   S6 AND (S1:S5 OR S7 OR S8)
S40         59   S6 AND S1
S41          0   S40(3N)S2
S42          0   S40(3N)S3
S43          0   S40(3N)S4
S44         29   S40(3N)S5
S45          0   S40(3N)S7
S46          0   S40(3N)S8
S47         13   RD S44  (unique items)
S48         13   S47 NOT (S17 OR S24 OR S30 OR S33 OR S38)
S49         13   S48 NOT PY>2003
```

17/3,K/1 (Item 1 from file: 8)
DIALOG(R)File 8:Ei Compendex(R)

03726295 E.I. No: EIP93101097941
Title: Very small HDTV Poly-Si TFT-LCD with fully integrated drivers
Author: Yamashita, Toshihiro; Shimada, Takayuki; Akebi, Yasunobu; Matsumoto, Toshio; Tsubota, Kohjiro; Fujioka, Kazuyoshi; Takafuji, Yutaka
Source: Shapu Giho/Sharp Technical Journal n 56 Jun 1993. p 43-46
Publication Year: 1993
CODEN: STEJD9 ISSN: 0285-0362
Language: Japanese

...Abstract: integrated drivers has been developed using high temperature process. Peripheral drivers have redundancy. The data **driver** has bidirectional scanning shift registers for **mirror** inversion of **displayed picture** to realize highly uniform picture color on screen. The scan driver has the multiplexer for...

17/3,K/2 (Item 1 from file: 94)
DIALOG(R)File 94:JICST-EPlus

05982074 JICST ACCESSION NUMBER: 05A0106566 FILE SEGMENT: JICST-E
A Driving Simulator with Driver Monitor System
ADACHI KAZUMASA (1); KOBAYASHI FUMIKAZU (1); YAMASAKI HATSUO (1); NAKANO MICHIAKI (1); TSUGAWA SADAYUKI (1); YAMAMOTO SHIN (1); ITO MICHIMASA (2)
(1) Meijo Univ., Graduate School of Sci. and Technol., JPN; (2) Tokairika R&dse
Denshi Joho Tsushin Gakkai Ronbunshi. D,1(IEICE Transactions on Information and Systems, Pt.1 (Japanese Edition), 2005, VOL.J88-D,NO.2, PAGE.421-430, FIG.15, TBL.4, REF.18
JOURNAL NUMBER: S0757BAG ISSN NO: 0915-1915
UNIVERSAL DECIMAL CLASSIFICATION: 656.1.08 629.33.04/.06 681.3:621.397.3
LANGUAGE: Japanese COUNTRY OF PUBLICATION: Japan
DOCUMENT TYPE: Journal
ARTICLE TYPE: Original paper
MEDIA TYPE: Printed Publication

...ABSTRACT: simulator capable of evaluating them, at present. Here were developed driving simulators for evaluating a **driver** assistant system mounting a technique mounting a developed camera for **driver monitor** in an inner **mirror** portion in vehicles to carry out consciousness estimation of **driver** through its **video picture** processing, a technique measuring driver's eye through the camera, and a technique on displays...

17/3,K/3 (Item 1 from file: 248)
DIALOG(R)File 248:PIRA

00423301 Pira Acc. Num.: 40004667
Title: A MONITOR SCREEN-INTEGRATED VIDEO CAMERA
Authors: Uekane K; Ikeda H
Patent Assignee: SHARP KK
Patent Number: EP 656726 Patent Date: 950607

Application number: JP 302017 Application Date: 931201
Publication Year: 1995
Document Type: Patent
Language: English

...Abstract: input to a monitor screen driver circuit. In the self-image picture taking mode the **monitor** screen **driver** circuit feeds a **mirror image** to the **display** screen.

24/3,K/1 (Item 1 from file: 2)
DIALOG(R)File 2:INSPEC

09568298 INSPEC Abstract Number: B2005-10-7260-011
Title: On a roll? [flexible-display technology]
Journal: Economist vol.375, no.8430 p.supl.34-6
Publisher: Economist Newspaper,
Publication Date: 11-17 June 2005 Country of Publication: UK
CODEN: EONOEH ISSN: 0013-0613
SICI: 0013-0613(20050611/17)375:8430L.supl.34:RFDT;1-E
Material Identity Number: G935-2005-023
Language: English
Subfile: B E

...Abstract: of flat-screen technology at the moment. Most displays consist of two main elements: a " **backplane** " that **controls** dots in the **display** (called picture elements, or pixels) turn on and off, and a "frontplane" that either emits...

24/3,K/2 (Item 2 from file: 2)
DIALOG(R)File 2:INSPEC

03106510 INSPEC Abstract Number: C83034648
Title: Control interface testing: a systems test approach to product service
Author(s): Cassas, D.
Author Affiliation: Service Products Div., GenRad Inc., Phoenix, AZ, USA
Conference Title: Northcon/83. Electronics Show & Convention p. 17/1/1-8
Publisher: Electron. Conventions, El Segundo, CA, USA
Publication Date: 1983 Country of Publication: USA 628 pp.
Conference Date: 10-12 May 1983 Conference Location: Portland, OR, USA
Language: English
Subfile: C

...Abstract: interfaces by using a single system tester to emulate the target system buses and control/ **monitor** system functions. **Control** interfaces include: multi- **backplane** system buses, microprocessor internal buses, serial and parallel buses.

24/3,K/3 (Item 1 from file: 8)
DIALOG(R)File 8:Ei Compendex(R)

07252578 E.I. No: EIP05068824916
Title: An intelligent communications backplane architecture
Author: Willis, J.; Gaur, A.; Cannon, S.
Corporate Source: Utah State University Space Software Lab., Logan, UT 84322-4205, United States
Conference Title: Proceedings of the International Conference on Embedded Systems and Applications ESA'04 - Proceedings of the International Conference on VLSI, VLSI'04
Conference Location: Las Vegas, NV, United States Conference Date: 20040621-20040624
E.I. Conference No.: 64234

Source: Proceedings of the International Conference on Embedded Systems and Applications ESA'04 - Proceedings of the International Conference on VLSI, VLSI'04 Proceedings of the International Conference on Embedded Systems and Applications ESA'04 - Proceedings of the INternational Conference on VLSI, VLSI'04 2004.
Publication Year: 2004
ISBN: 1932415416
Language: English

...Abstract: consists of subsystem ports, a field programmable gate array (FPGA) behaving as switch fabric, a **backplane** (**PANEL**) **controller** and a multi-drop serial bus. The PANEL controller manages the multi-drop bus to...

24/3,K/4 (Item 2 from file: 8)
DIALOG(R)File 8:Ei Compendex(R)

04959186 E.I. No: EIP98034101343
Title: Electrical noise considerations
Author: Anon
Source: Elevator World v 46 n 2 Feb 1998. p 83-85
Publication Year: 1998
CODEN: ELVWAM ISSN: 0013-6158
Language: English

...Abstract: Grounding to a conduit or steel structure is not adequate, nor is just grounding the **control** to the **panel back plate** of the enclosure. The ground must be connected directly to the control and then the...

30/3,K/1 (Item 1 from file: 2)
DIALOG(R)File 2:INSPEC

04377633 INSPEC Abstract Number: B89041255, C89031532
Title: Analysis and design of optimum-amplitude nine-switch direct AC-AC converters
Author(s): Alesina, A.; Venturini, M.G.B.
Author Affiliation: Dept. of Math., Milan Univ., Italy
Journal: IEEE Transactions on Power Electronics vol.4, no.1 p. 101-12
Publication Date: Jan. 1989 Country of Publication: USA
ISSN: 0885-8993
U.S. Copyright Clearance Center Code: 0885-8993/89/0100-0101$01.00
Language: English
Subfile: B C

Abstract: The maximum input-output transformer ratio, or output voltage ability, of direct AC-AC **pulse - width** -modulated converters is explored. An intrinsic limit, independent of the control algorithm, is found. A suitable novel converter control algorithm is discussed which achieves such maximum output amplitude ability and **displays** some interesting features. Finally, the opportunity to implement AC-AC converter control with the use of feedback techniques is considered, and a **feedback** -based control **algorithm** for the converter is proposed.
...Descriptors: **pulse width** modulation
...Identifiers: **pulse - width** -modulated converters

30/3,K/2 (Item 2 from file: 2)
DIALOG(R)File 2:INSPEC

04258954 INSPEC Abstract Number: B88075787, C88061858
Title: Intrinsic amplitude limits and optimum design of 9-switches direct PWM AC-AC converters
Author(s): Alesina, A.; Venturini, M.
Author Affiliation: Dept. of Math., Milano Univ., Italy
Conference Title: PESC '88 Record. 19th Annual IEEE Power Electronics Specialists Conference (Cat. No.88CH2523-9) p.1284-91 vol.2
Publisher: IEEE, New York, NY, USA
Publication Date: 1988 Country of Publication: USA 2 vol. xix+1363 pp.
U.S. Copyright Clearance Center Code: CH2523-9/88/0000-1284$01.00
Conference Sponsor: IEEE; IEICE Japan
Conference Date: 11-14 April 1988 Conference Location: Kyoto, Japan
Language: English
Subfile: B C

...Abstract: found. A novel converter control algorithm is discussed that achieves the maximum output amplitude and **displays** some interesting features. The implementation of AC-AC converter control using feedback techniques is considered, and a **feedback** -based control **algorithm** is proposed.
...Descriptors: **pulse width** modulation

34/3,K/1 (Item 1 from file: 2)
DIALOG(R)File 2:INSPEC

09438266 INSPEC Abstract Number: B2005-07-1290B-006
Title: A DC-DC converter integrated easily using single variable steps feedback algorithm
Author(s): Yuan Gang; Shi Yin
Author Affiliation: Inst. of Semicond., Chinese Acad. of Sci., Beijing, China
Journal: Chinese Journal of Semiconductors vol.24, no.7 p.769-74
Publisher: Science Press,
Publication Date: July 2003 Country of Publication: China
CODEN: PTTPDZ ISSN: 0253-4177
SICI: 0253-4177(200307)24:7L.769:CIEU;1-W
Material Identity Number: A658-2003-009
Language: Chinese
Subfile: B

Title: A DC-DC converter integrated easily using single variable steps feedback algorithm
...Abstract: control DC-DC converter is presented, which uses a single comparator. It adopts variable step **feedback algorithm** and duty cycle dither, and obtains 7 bits voltage resolution with PWM signal of only 6 bit binary duty cycle. Because of the variable step **feedback algorithm** , this converter has better dynamic performance than those with constant step, and has low complexity...
...Descriptors: **pulse width** modulation
Identifiers: single variable steps **feedback algorithm** ;

34/3,K/2 (Item 2 from file: 2)
DIALOG(R)File 2:INSPEC

07413142 INSPEC Abstract Number: A2000-01-3325-005
Title: Feedback optimization of pulse width **in the SORC sequence**
Author(s): Schiano, J.L.; Routhier, T.; Blauch, A.J.; Ginsberg, M.D.
Author Affiliation: Dept. of Electr. Eng., Pennsylvania State Univ., University Park, PA, USA
Journal: Journal of Magnetic Resonance vol.140, no.1 p.84-90
Publisher: Academic Press,
Publication Date: Sept. 1999 Country of Publication: USA
CODEN: JOMRA4 ISSN: 1090-7807
SICI: 1090-7807(199909)140:1L.84:FOPW;1-L
Material Identity Number: J153-1999-010
U.S. Copyright Clearance Center Code: 1090-7807/99/$30.00
Language: English
Subfile: A

Title: Feedback optimization of pulse width **in the SORC sequence**
...Abstract: will not yield the largest SNR for all possible search applications. This paper describes a **feedback algorithm** that uses measurements of the NQR signal to automatically adjust the **pulse width** in the strong off-resonant comb sequence to maximize the SNR of the NQR measurement...
...Identifiers: **pulse width** ; ...

... **feedback** **algorithm** ;

34/3,K/3 **(Item 3 from file: 2)**
DIALOG(R)File 2:INSPEC

01537020 INSPEC Abstract Number: C73015958
Title: Design of suboptimal PWM control systems
Author(s): Saito, H.; Terao, M.
Author Affiliation: Univ. Tokyo, Bunkyo-ku, Japan
Journal: Transactions of the Society of Instrument and Control Engineers vol.9, no.1 p.64-70
Publication Date: Feb. 1973 Country of Publication: Japan
CODEN: TSICA9 ISSN: 0453-4654
Language: Japanese
Subfile: C

Abstract: Presents a design method for suboptimal PWM (**pulse - width** -modulated) control systems which can nearly minimize a quadratic performance index. The suboptimal PWM control systems can be constructed in a closed-loop configuration with a state **feedback** . The proposed **algorithm** to decide control signals is easily applied to DDC effectively. When the suboptimal control pulses...

...a pulse is determined by the switching plane in the state space, and the suboptimal **pulse** **width** is determined by solving a specified quadratic equation reduced by some approximations. The result of...
...Descriptors: **pulse** **width** modulation
...Identifiers: **pulse** **width** modulated control systems

34/3,K/4 **(Item 1 from file: 6)**
DIALOG(R)File 6:NTIS

2152392 NTIS Accession Number: ADA371024/XAB
Design and Implementation of a Zero-Voltage-Switching, Pulse - Width **-Modulated, High-Frequency, Resonant Buck Chopper**
(Master's thesis)
Turner, C. C.
Naval Postgraduate School, Monterey, CA.
Corp. Source Codes: 019895000; 251450
Sep 1999 148p
Languages: English Document Type: Thesis
Journal Announcement: USGRDR0007
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NTIS Prices: PC A08/MF A02

Design and Implementation of a Zero-Voltage-Switching, Pulse - Width **-Modulated, High-Frequency, Resonant Buck Chopper**
... low voltage buck chopper is simulated utilizing PSPICE and modeled in the lab. A voltage **feedback** control **algorithm** is developed and utilized with the PSPICE model. A comparative study of circuit efficiency is...

34/3,K/5 **(Item 1 from file: 8)**

DIALOG(R)File 8:Ei Compendex(R)

03771431 E.I. No: EIP93121161921
Title: Modelling and control of an AC/AC boost-buck converter
Author: Hofmeester, N.H.M.; van den Bosch, P.P.J.; Klaassens, J.B.
Corporate Source: Delft Univ of Technology, Delft, Neth
Conference Title: Proceedings of the 5th European Conference on Power Electronics and Applications.
Conference Location: Brighton, UK Conference Date: 19930913-19930916
E.I. Conference No.: 19652
Source: System Engineering IEE Conference Publication v 7 n 377 1993. Publ by IEE, Michael Faraday House, Stevenage, Engl. p 85-90
Publication Year: 1993
CODEN: IECPB4 ISSN: 0537-9987 ISBN: 0-85296-589-3
Language: English

...Abstract: control independently both the input power factor and the output voltage. This paper presents a **feedback** control **algorithm** needed for converter operation under dynamical grid disturbances and load variations. The controller uses a...
Descriptors: *Power converters; Active filters; Electric network topology ; Digital control systems; Algorithms; **Pulse width** modulation; Power control; Voltage control; Transients; Vectors

34/3,K/6 (Item 1 from file: 94)
DIALOG(R)File 94:JICST-EPlus

00420392 JICST ACCESSION NUMBER: 87A0264525 FILE SEGMENT: JICST-E
Characteristics of GTO current output type converter with pulse width **modulation.**
ITOH RYOZO (1); ISHIZAKA KOUICHI (1)
(1) Fukuoka Univ.
Fukuoka Daigaku Kogaku Shuho(Fukuoka University Review of Technological Sciences), 1987, NO.38, PAGE.31-38, FIG.13, REF.4
JOURNAL NUMBER: S0905AAE ISSN NO: 0285-2799
UNIVERSAL DECIMAL CLASSIFICATION: 621.314.5
LANGUAGE: Japanese COUNTRY OF PUBLICATION: Japan
DOCUMENT TYPE: Journal
ARTICLE TYPE: Original paper
MEDIA TYPE: Printed Publication

Characteristics of GTO current output type converter with pulse width **modulation.**
...ABSTRACT: control of firing angle from delayed to advenced region. This paper discusses the availability of **pulse width** modulation technique for presented GTO current output type converter to adjust the input power factor...
...is regulated by varing the degree of modulation in this system. We show the control **algorithm** with current **feedback** and experimental results which are verified by strict state-space analysis.(author abst.)

34/3,K/7 (Item 1 from file: 95)
DIALOG(R)File 95:TEME-Technology & Management

01034137 I96083118310
Knowledge-based parameter estimation for identification and equalization of storage channels
(Wissensbasierende Parameterschaetzung zur Identifisierung und zur Anpassung von Speicherkanaelen)
Shafiee, H; Moon, J
Dept. of Electr. Eng., Minnesota Univ., Minneapolis, MN, USA
IEEE Transactions on Magnetics, v32, n4, PT.2, pp3274-3282, 1996
Document type: journal article Language: English
Record type: Abstract
ISSN: 0018-9464

ABSTRACT:
...the channel identification problem is reduced to estimation of one or more parameters. Specifically, the **pulse width** at half of the transition response peak magnitude is first estimated. The algorithm is then...
DESCRIPTORS: DELAY CORRECTION; EXPERT SYSTEMS; PARAMETER ESTIMATION; RECURSIVE FILTERS; PARAMETER IDENTIFICATION; **ALGORITHM** ; CONVERGENCE; DECODER; **FEEDBACK** ; MAGNETIC RECORDING; FILTER THEORY; DIGITAL TECHNIQUE; EQUALISATION; FILTERING

34/3,K/8 (Item 1 from file: 144)
DIALOG(R)File 144:Pascal

09226295 PASCAL No.: 91-0016671
A generalized computer-aided formulation for the dynamic and steady state analysis of induction machine inverter drive systems
CHEUNG R W Y; JIN H; WU B; LAVERS J D
Ryerson polytech. inst., dep. electrical eng., Toronto M5B 2K3, Canada
IEEE/PES 1990. Winter meeting (Atlanta GA USA) 1990-02-04
Journal: IEEE transactions on energy conversion, 1990, 5 (2) 337-343
Language: English

... algorithm using a simple nodal approach for automatic formulation of power electronic circuits. A novel **pulse - width** -modulated current-source-inverter drive system is employed to demonstrate the efficiency of the proposed...

English Descriptors: Electric drive; Inverter; Induction machine; Performance; Operating rate; Computer aided analysis; Formulation; **Feedback** ; Power control; Modeling; **Algorithm** ; Power electronics; Pulse duration modulation

38/3,K/1 (Item 1 from file: 8)
DIALOG(R)File 8:Ei Compendex(R)

02773263 E.I. Monthly No: EI8908071759
Title: Analysis and design of optimum-amplitude nine-switch direct AC-AC converters.
Author: Alesina, Alberto; Venturini, Marco G. B.
Corporate Source: Univ of Milan, Milan, Italy
Source: IEEE Transactions on Power Electronics v 4 n 1 Jan 1989 p 101-112
Publication Year: 1989
CODEN: ITPEE8 ISSN: 0885-8993
Language: English

Abstract: The maximum input-output transformer ratio, or output voltage ability, of direct AC-AC **pulse - width** -modulated converters is explored. An intrinsic limit, independent of the control algorithm, is found. A...

...implement AC-AC converter control with the use of feedback techniques is considered, and a **feedback** -based control **algorithm** for the converter is proposed. 10 Refs.

38/3,K/2 (Item 1 from file: 34)
DIALOG(R)File 34:SciSearch(R) Cited Ref Sci

08028467 Genuine Article#: 238GZ No. References: 19
Title: Feedback optimization of pulse width in the SORC sequence
Author(s): Schiano JL (REPRINT) ; Routhier T; Blauch AJ; Ginsberg MD
Corporate Source: PENN STATE UNIV,DEPT ELECT ENGN, 227D ELECT ENGN W/UNIVERSITY PK//PA/16802 (REPRINT); US COAST GUARD,COMMAND & CONTROL ENGN CTR/PORTSMOUTH//VA/23703; USA,CONSTRUCT ENGN RES LABS/CHAMPAIGN//IL/61826
Journal: JOURNAL OF MAGNETIC RESONANCE, 1999, V140, N1 (SEP), P84-90
ISSN: 1090-7807 Publication date: 19990900
Publisher: ACADEMIC PRESS INC, 525 B ST, STE 1900, SAN DIEGO, CA 92101-4495
Language: English Document Type: ARTICLE (ABSTRACT AVAILABLE)

...Abstract: will not yield the largest SNR for all possible search applications. This paper describes a **feedback algorithm** that uses measurements of the NQR signal to automatically adjust the **pulse width** in the strong off-resonant comb sequence to maximize the SNR of the NQR measurement...

49/3,K/1 (Item 1 from file: 2)
DIALOG(R)File 2:INSPEC

05624966 INSPEC Abstract Number: B9404-1265F-044, C9404-5260B-249
Title: Video compression architectures: dedicated, programmable, or hybrid?
Author(s): Hatamian, M.; Ackland, B.; Ang, P.H.; Guttag, K.; Nishitani, T.; Purcell, S.C.; Wang, C.-S.
Author Affiliation: SDE Inc., Lakewood, NJ, USA
p.204-5
Editor(s): Wuorinen, J.H.
Publisher: IEEE, New York, NY, USA
Publication Date: 1993 Country of Publication: USA 336 pp.
ISBN: 0 7803 0987 1
U.S. Copyright Clearance Center Code: 0 7803 0987 1/93/$3.00
Conference Title: Proceedings of IEEE International Solid-State Circuits Conference - ISSCC '93
Conference Sponsor: IEEE
Conference Date: 24-26 Feb. 1993 Conference Location: San Francisco, CA, USA
Language: English
Subfile: B C

Abstract: A **panel** -session summary on **video** compression architectures is presented. Early approaches to compression were highly polarized: dedicated and programmable. The...

49/3,K/2 (Item 2 from file: 2)
DIALOG(R)File 2:INSPEC

04178028 INSPEC Abstract Number: B88044222, C88040219
Title: Future directions in semiconductors for computer graphics
Author(s): Guttag, K.
Author Affiliation: Texas Instrum., Houston, TX, USA
Conference Title: Proceedings of the Seventh Annual Conference and Exposition: Computer Graphics '86 p.423-30 vol.3
Publisher: Nat. Comput. Graphics Assoc, Fairfax, VA, USA
Publication Date: 1986 Country of Publication: USA 3 vol.(531+437+795) pp.
ISBN: 0 941514 10 2
Conference Sponsor: Comput. Graphics. Assoc
Conference Date: 11-15 May 1986 Conference Location: Anaheim, CA, USA
Language: English
Subfile: B C

Abstract: The author discusses the trends in semiconductors for computer **graphics** **display** systems plus a brief discussion of some related areas and their impact on semiconductor trends...

49/3,K/3 (Item 3 from file: 2)
DIALOG(R)File 2:INSPEC

03844872 INSPEC Abstract Number: C87022137
Title: The Texas Instruments 34010 Graphics System Processor
Author(s): Asal, M.; Short, G.; Preston, T.; Simpson, R.; Roskell, D.;

Guttag, K.M.
Author Affiliation: Texas Instruments Inc., Houston, TX, USA
Journal: IEEE Computer Graphics and Applications vol.6, no.10 p. 24-39
Publication Date: Oct. 1986 Country of Publication: USA
CODEN: ICGADZ ISSN: 0272-1716
U.S. Copyright Clearance Center Code: 0272-1716/86/1000-0024$01.00
Language: English
Subfile: C

...Abstract: many different graphics and nongraphics applications. It was designed to support a wide range of **display** resolutions and **pixel** sizes, as well as applications such as page (laser) printers, ink-jet printers, data compression...

49/3,K/4 (Item 4 from file: 2)
DIALOG(R)File 2:INSPEC

03646619 INSPEC Abstract Number: B86027349, C86024011
Title: Requirements for a VLSI graphics processor
Author(s): Guttag, K.; Van Aken, J.; Asal, M.
Author Affiliation: Texas Instrum. Inc., Houston, TX, USA
Journal: IEEE Computer Graphics and Applications vol.6, no.1 p. 32-47
Publication Date: Jan. 1986 Country of Publication: USA
CODEN: ICGADZ ISSN: 0272-1716
U.S. Copyright Clearance Center Code: 0272-1716/86/0100-0032$01.00
Language: English
Subfile: B C

...Abstract: processor should provide a cost-effective means for achieving high performance in color bit-mapped **graphics displays** for PCs and workstations. The goal in selecting an architecture is to reduce the components...

... result in screen updates that occur without perceptible delay. These improvements should enable bit-mapped **graphics displays** to replace the text-only displays that have seen widespread use in cost-sensitive applications.
...Identifiers: bit-mapped **graphics displays** ;

49/3,K/5 (Item 5 from file: 2)
DIALOG(R)File 2:INSPEC

03564449 INSPEC Abstract Number: C86003721
Title: New silicon to solve fundamental graphics problems
Author(s): Guttag, K.; Van Aken, J.
Author Affiliation: Texas Instruments Inc., Houston, TX, USA
Conference Title: Digest of Papers COMPCON Spring 85. Thirtieth IEEE Computer Society International Conference. Technological Leverage: A Competitive Necessity (Cat. No. 85CH2135-2) p.276-9
Publisher: IEEE Comput. Soc. Press, Los Alamitos, CA, USA
Publication Date: 1985 Country of Publication: USA xv+434 pp.
ISBN: 0 8186 0613 4
U.S. Copyright Clearance Center Code: CH2135-2/85/0000-0276$01.00
Conference Sponsor: IEEE
Conference Date: 25-28 Feb. 1985 Conference Location: San Francisco,

CA, USA
Language: English
Subfile: C

...Abstract: screen refresh and DRAM refresh functions. Even in the case of a high-resolution color **display** , the **graphics** processor is allocated about 95% of the available memory cycles for manipulation of graphics data.

49/3,K/6 (Item 6 from file: 2)
DIALOG(R)File 2:INSPEC

03160494 INSPEC Abstract Number: B84000633, C84001762
Title: Video RAM excels at fast graphics
Author(s): Pinkham, R.; Novak, M.; Guttag, K.
Author Affiliation: Texas Instruments Inc., Houston, TX, USA
Journal: Electronic Design vol.31, no.17 p.160-72
Publication Date: 18 Aug. 1983 Country of Publication: USA
CODEN: ELODAW ISSN: 0013-4872
Language: English
Subfile: B C

Abstract: High-performance **video** **display** systems place demands on dynamic memories to meet their performance needs. Designed specifically for such...
...Identifiers: **video** **display** systems

49/3,K/7 (Item 7 from file: 2)
DIALOG(R)File 2:INSPEC

03108528 INSPEC Abstract Number: B83048382, C83034073
Title: The TMS 9918, video display **processor for personal computers**
Author(s): Guttag, K.M.
Author Affiliation: Texas Instruments Inc., Houston, TX, USA
Conference Title: Wescon/80 Conference Record p.2-2/1-4
Publisher: Electron. Conventions, El Segundo, CA, USA
Publication Date: 1980 Country of Publication: USA 964 pp.
Conference Date: 16-18 Sept. 1980 Conference Location: Anaheim, CA, USA
Language: English
Subfile: B C

Title: The TMS 9918, video display **processor for personal computers**
Abstract: The TMS 9918, **video** **display** processor (VDP), is an advanced **video** **display** controller integrated circuit that was designed to support cost effective personal computer systems and low...

... dynamic RAMs; general purpose 8 bit CPU interface that eliminates the need for DMA to **display** RAM; single composite **video** output; and base address registers to allow for dynamic allocation of display memory.
...Identifiers: **video** **display** processor...
... **video** **display** controller integrated circuit

49/3,K/8 (Item 8 from file: 2)
DIALOG(R)File 2:INSPEC

02711845 INSPEC Abstract Number: B81034211, C81023573
Title: Video Display **Processor**
Author(s): Guttag, K.M.; Macourek, P.H.
Author Affiliation: MOS Microcomputer Design, Texas Instruments Inc., Houston, TX, USA
Journal: IEEE Transactions on Consumer Electronics vol.CE-27, no.1 p.27-34
Publication Date: Feb. 1981 Country of Publication: USA
CODEN: ITCEDA ISSN: 0098-3063
Language: English
Subfile: B C

Title: Video Display **Processor**
Abstract: The **Video Display** Processor (VDP), a single chip **video display** system, is presented. The VDP provides high resolution color pattern graphics in combination with object oriented **graphics** , for **display** on an ordinary television receiver or simple monitor.
Identifiers: **Video Display** Processor...

49/3,K/9 (Item 9 from file: 2)
DIALOG(R)File 2:INSPEC

02629109 INSPEC Abstract Number: C81005140
Title: The TMS 9918 video display **processor: a brief overview**
Author(s): Guttag, K.
Author Affiliation: Texas Instruments Inc., Houston, TX, USA
Conference Title: Proceedings of distributed computing. COMPCON 80, Twenty-First IEEE Computer Society International Conference p.219-23
Publisher: IEEE, New York, NY, USA
Publication Date: 1980 Country of Publication: USA xi+746 pp.
Conference Sponsor: IEEE
Conference Date: 23-25 Sept. 1980 Conference Location: Washington, DC, USA
Language: English
Subfile: C

Title: The TMS 9918 video display **processor: a brief overview**
Abstract: The TMS 9918 **Video Display** Processor (VDP) is presented. The VDP provides high resolution color graphics in combination with object oriented **graphics** for **display** on an ordinary television receiver or simple monitor. In addition to briefly describing some of...
Identifiers: **video display** processor...

49/3,K/10 (Item 10 from file: 2)
DIALOG(R)File 2:INSPEC

02629082 INSPEC Abstract Number: C81005112
Title: Video display **processor simulates three dimensions**
Author(s): Guttag, K.; Hayn, J.
Author Affiliation: Texas Instruments Inc., Dallas, TX, USA
Journal: Electronics vol.53, no.25 p.123-6
Publication Date: 20 Nov. 1980 Country of Publication: USA
CODEN: ELECAD ISSN: 0883-4989
Language: English
Subfile: C

Title: Video display **processor simulates three dimensions**
Abstract: Describes the TMS 9918 A **video display** processor which represents a new generation of interface. It makes possible a low cost display...

... microprocessors. And since the VDP refreshes the display memory automatically and interfaces directly with standard **video monitors**, very few other parts are needed to implement a system.
...Identifiers: **video display** processor...

...colour **graphics display**

49/3,K/11 (Item 1 from file: 8)
DIALOG(R)File 8:Ei Compendex(R)

02686017 E.I. Monthly No: EI8812115451
Title: TMS34010: AN EMEBEDDED MICROPROCESSOR.
Author: Guttag, Karl M.; Albers, Thomas M.; Asal, Michael D.; Rose, Kevin G.
Corporate Source: Texas Instruments, Houston, TX, USA
Source: IEEE Micro v 8 n 3 Jun 1988 p 39-52
Publication Year: 1988
CODEN: IEMIDZ ISSN: 0272-1732
Language: English

...Abstract: random-access memory) interface make it suitable for many other embedded processing applications are described: **graphics** terminal and **display** systems; consumer electronics; **image** compression for facsimile and CD-ROM; and page printers. 15 refs.

49/3,K/12 (Item 2 from file: 8)
DIALOG(R)File 8:Ei Compendex(R)

02028284 E.I. Monthly No: EI8610093755 E.I. Yearly No: EI86021075
Title: FIRST GRAPHICS PROCESSOR TAKES COMPLEX ORDERS TO RUN BIT-MAPPED DISPLAYS.
Author: Wientjes, Brent; Guttag, Karl; Rosekell, Derek
Corporate Source: Texas Instruments Inc, Dallas, TX, USA
Source: Electronic Design v 34 n 2 Jan 23 1986 p 73-78, 80, 82
Publication Year: 1986
CODEN: ELODAW ISSN: 0013-4872
Language: ENGLISH

Identifiers: **GRAPHICS** PROCESSOR; BIT-MAPPED **DISPLAYS**

49/3,K/13 (Item 1 from file: 56)
DIALOG(R)File 56:Computer and Information Systems Abstracts

0000033225 IP ACCESSION NO: 0041854
Video Display **Processor**

Ackley, D A; Rogers, G D; Macourek, H; Guttag, K M; Chang, K S
TX Inst. Inc., Dallas, TX

ADDL. SOURCE INFO: United Patent Official Gazette [U. S. PAT. OFF. GAZ.], vol. 1002, no. 1, p. 391, 1981
PUBLICATION DATE: 1981

RECORD TYPE: Abstract
LANGUAGE: English
FILE SEGMENT: Computer & Information Systems Abstracts

Video Display **Processor**

ABSTRACT:
In a **video display** system for use with a raster-scanned **video display** unit, the system including: a random access memory having stored therein a first ordered array...
...map a set of video color codes into the M columns of N rows of **video display** elements comprising a first video image; a second ordered array of digital code elements which map said set of video color codes into the S columns of T rows of **video display** elements comprising a second video image; and a third array containing a column displacement U and a row displacement V for the **display** of the second **video** image relative to the first video image, where 1 less than or equal to S...

DESCRIPTORS: **Video display** systems; **Display** processors; Patent

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File 344:Chinese Patents Abs Jan 1985-2006/Jan
         (c) 2006 European Patent Office
File 347:JAPIO Nov 1976-2005/Oct(Updated 060203)
         (c) 2006 JPO & JAPIO
File 350:Derwent WPIX 1963-2006/UD,UM &UP=200609
         (c) 2006  Thomson Derwent
File 371:French Patents 1961-2002/BOPI 200209
         (c) 2002 INPI.  All rts. reserv.

Set     Items   Description
S1    2275309   PIXEL? OR PEL OR (PICTURE OR PIXEL?)()ELEMENT?? OR IMAGE OR
              MOVING()IMAGE?? OR PICTURE? OR PHOTO OR PHOTOS OR PHOTOGRAPH-
              ?? OR VIDEO?? OR VIDEO(3N)DATA OR MOVIE?? OR GRAPHIC?? OR  JP-
              EG OR GIF OR MPEG
S2       2658   (MUX OR (BALANC??? OR FLIP(3N)FLOP)()CIRCUIT? OR DECODER??
              OR DRIVER?? OR LATCH)(10N)MIRROR??
S3        415   (BACK(3N)(PLANE?? OR PLATE??) OR BACKPLATE?? OR BACKPLANE?-
              ?)(3N)CONTROL?
S4       5054   ELECTRODE??(10N)MODULAT?
S5    1922045   DISPLAY?? OR MONITOR?? OR PANEL OR LCD OR LCOS LIQUID()CRY-
              STAL()(DISPLAY OR ON()SILICON)
S6        143   AU=(GUTTAG, K? OR GUTTAG K? OR GUTTAG, A? OR GUTTAG A?)
S7      49526   PULSE()WIDTH
S8        447   (RECURSIVE OR ALGORITHM? OR PROGRAM?? OR ROUTINE??)(3N)(FE-
              EDBACK?? OR FEED()BACK)
S9          0   S3(3N)S4
S10         1   S3 AND S4
S11       142   S1(3N)S2
S12         0   S11 AND S3
S13         0   S11 AND S4
S14        21   S11(3N)S5
S15         0   S14(3N)(S7 OR S8)
S16         0   S14 AND (S7 OR S8)
S17         2   S14 AND IC=G09G?
S18         2   S17 NOT S10
S19         0   S6 AND S11
S20         1   S6 AND S3
S21         0   S20 NOT (S10 OR S18)
S22         2   S7(20N)S8
S23         0   S22 NOT (S10 OR S22)
S24         1   S22 NOT (S10 OR S18)
S25         0   S24 NOT MOTOR
S26        27   S6 AND IC=G09G?
S27        23   S26 AND (S1:S5 OR S7 OR S8)
S28        22   S27 NOT AD=20030520:20060209/PR
S29        22   S28 NOT (S10 OR S18)
S30         0   S29 AND PULSE()WIDTH
```

10/3,K/1 (Item 1 from file: 350)
DIALOG(R)File 350:Derwent WPIX
(c) 2006 Thomson Derwent. All rts. reserv.

016695568 **Image available**
WPI Acc No: 2005-019847/200502
XRPX Acc No: N05-016829
Visual display device for personal computer, controls pulse width using recursive feedback for driving electrodes **to control each light** modulating **element of array of light** modulating **elements arranged on silicon backplane**
Patent Assignee: GUTTAG A (GUTT-I); GUTTAG K M (GUTT-I); KAGUTECH LTD (KAGU-N)
Inventor: GUTTAG A; GUTTAG K M; GUTTAG K
Number of Countries: 108 Number of Patents: 002
Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
US 20040233150	A1	20041125	US 2003471731	P	20030520	200502 B
			US 2004568253	P	20040506	
			US 2004849195	A	20040520	
WO 2004104790	A2	20041202	WO 2004US15877	A	20040520	200502

Priority Applications (No Type Date): US 2004849195 A 20040520; US 2003471731 P 20030520; US 2004568253 P 20040506
Patent Details:

Patent No	Kind	Lan	Pg	Main IPC	Filing Notes
US 20040233150	A1		76	G09G-003/36	Provisional application US 2003471731
					Provisional application US 2004568253
WO 2004104790	A2	E		G06F-000/00	

Designated States (National): AE AG AL AM AT AU AZ BA BB BG BR BW BY BZ CA CH CN CO CR CU CZ DE DK DM DZ EC EE EG ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NA NI NO NZ OM PG PH PL PT RO RU SC SD SE SG SK SL SY TJ TM TN TR TT TZ UA UG US UZ VC VN YU ZA ZM ZW
Designated States (Regional): AT BE BG BW CH CY CZ DE DK EA EE ES FI FR GB GH GM GR HU IE IT KE LS LU MC MW MZ NA NL OA PL PT RO SD SE SI SK SL SZ TR TZ UG ZM ZW

Visual display device for personal computer, controls pulse width using recursive feedback for driving electrodes **to control each light** modulating **element of array of light** modulating **elements arranged on silicon backplane**

Abstract (Basic):
... The **electrodes** control a light **modulating** element of an array of light **modulating** elements arranged on a silicon **backplane** . A recursive feedback **controller** controls a pulse width using recursive feedback for driving the **electrodes** to control each light **modulating** element.

18/3,K/1 (Item 1 from file: 350)
DIALOG(R)File 350:Derwent WPIX
(c) 2006 Thomson Derwent. All rts. reserv.

012068341 **Image available**
WPI Acc No: 1998-485252/199842
XRPX Acc No: N98-378797
LCD device - has source and data drivers that pass image data selectively to LC panel to carry out mirror inversion of displayed image
Patent Assignee: MATSUSHITA DENKI SANGYO KK (MATU)
Number of Countries: 001 Number of Patents: 001
Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week	
JP 10207430	A	19980807	JP 977580	A	19970120	199842	B

Priority Applications (No Type Date): JP 977580 A 19970120
Patent Details:

Patent No	Kind	Lan	Pg	Main IPC	Filing Notes
JP 10207430	A		8	G09G-003/36	

...Abstract (Basic): to the interface. The display data is selectively passed to the pixels of the LC **panel** from the **drivers** . The **displayed image** direction is changed horizontally or **mirror** inversion is carried out vertically...
International Patent Class (Main): **G09G-003/36**

18/3,K/2 (Item 2 from file: 350)
DIALOG(R)File 350:Derwent WPIX
(c) 2006 Thomson Derwent. All rts. reserv.

009458374 **Image available**
WPI Acc No: 1993-151900/199318
XRPX Acc No: N93-116275
Spatial light modulator for digitised video display for computer, TV - includes addressing circuitry which memory cells are directly connected to display cells
Patent Assignee: TEXAS INSTR INC (TEXI)
Inventor: DEMOND T W; THOMPSON E E
Number of Countries: 001 Number of Patents: 001
Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week	
US 5206629	A	19930427	US 89315639	A	19890227	199318	B
			US 91725907	A	19910703		

Priority Applications (No Type Date): US 89315639 A 19890227; US 91725907 A 19910703
Patent Details:

Patent No	Kind	Lan	Pg	Main IPC	Filing Notes
US 5206629	A		131	G09G-003/00	Cont of application US 89315639

...Abstract (Basic): deformable mirror cells with two or more memory cells associated with each mirror cell. A **decoder** address has one memory cell assoicated with most of the **mirror** cells of the array to **display** an **image** . A second **decoder** address one memory cell of each memory cell in the array to allow information to...
International Patent Class (Main): **G09G-003/00**

File 348:EUROPEAN PATENTS 1978-2006/Jan W05
(c) 2006 European Patent Office
File 349:PCT FULLTEXT 1979-2006/UB=20060112,UT=20060105
(c) 2006 WIPO/Univentio

Set	Items	Description
S1	676695	PIXEL? OR PEL OR (PICTURE OR PIXEL?)()ELEMENT?? OR IMAGE OR MOVING()IMAGE?? OR PICTURE? OR PHOTO OR PHOTOS OR PHOTOGRAPH-?? OR VIDEO?? OR VIDEO(3N)DATA OR MOVIE?? OR GRAPHIC?? OR JPEG OR GIF OR MPEG
S2	2527	(MUX OR (BALANC??? OR FLIP(3N)FLOP)()CIRCUIT? OR DECODER?? OR DRIVER?? OR LATCH)(10N)MIRROR??
S3	766	(BACK(3N)(PLANE?? OR PLATE??) OR BACKPLATE?? OR BACKPLANE?-?)(3N)CONTROL?
S4	4358	ELECTRODE??(10N)MODULAT?
S5	619874	DISPLAY?? OR MONITOR?? OR PANEL OR LCD OR LCOS LIQUID()CRYSTAL()(DISPLAY OR ON()SILICON)
S6	29	AU=(GUTTAG, K? OR GUTTAG K? OR GUTTAG, A? OR GUTTAG A?)
S7	29348	PULSE()WIDTH
S8	2024	(RECURSIVE OR ALGORITHM? OR PROGRAM?? OR ROUTINE??)(3N)(FEEDBACK?? OR FEED()BACK)
S9	2	S4(3N)(S7 AND S8)
S10	280	S1(3N)S2
S11	0	S10(3N)S3
S12	0	S20(3N)S4
S13	0	S10(3N)(S7 AND S8)
S14	0	S10 AND (S7 AND S8)
S15	0	S10(3N)(S7 OR S8)
S16	32	S10(3N)S5
S17	3	S16 AND IC=G09G?
S18	0	S10 AND S3
S19	6	S10 AND S4
S20	6	S19 AND S5
S21	0	S20 AND S6
S22	1	S20 AND S7
S23	1	S22 NOT (S9 OR S17)
S24	5	S20 NOT (S9 OR S17 OR S23)
S25	2	S24 AND IC=G09G?
S26	3	S24 NOT S25
S27	0	S6 AND IC=G06G?

9/3,K/1 (Item 1 from file: 349)
DIALOG(R)File 349:PCT FULLTEXT

01181463 **Image available**
DIGITAL BACKPLANE
FACE ARRIERE NUMERIQUE
Patent Applicant/Assignee:
KAGUTECH LTD, 6425 Rockbluff Circle, Plano, Texas 75024, US, US (Residence), US (Nationality), (For all designated states except: US)
Patent Applicant/Inventor:
GUTTAG Karl, 6425 Rockbluff Circle, Plano, Texas 75024, US, US (Residence), US (Nationality), (Designated only for: US)
GUTTAG Alvin, 415 Russell Avenue #108, Gaithersburg, Maryland 20877, US, US (Residence), US (Nationality), (Designated only for: US)
Legal Representative:
JAGTIANI Ajay (agent), 10363-A Democracy Lane, Fairfax, Virginia 22030, US,
Patent and Priority Information (Country, Number, Date):
Patent: WO 2004104790 A2-A3 20041202 (WO 04104790)
Application: WO 2004US15877 20040520 (PCT/WO US04015877)
Priority Application: US 2003471731 20030520; US 2004568253 20040506
Designated States:
(All protection types applied unless otherwise stated - for applications 2004+)
AE AG AL AM AT AU AZ BA BB BG BR BW BY BZ CA CH CN CO CR CU CZ DE DK DM DZ EC EE EG ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NA NI NO NZ OM PG PH PL PT RO RU SC SD SE SG SK SL SY TJ TM TN TR TT TZ UA UG US UZ VC VN YU ZA ZM ZW
(EP) AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IT LU MC NL PL PT RO SE SI SK TR
(OA) BF BJ CF CG CI CM GA GN GQ GW ML MR NE SN TD TG
(AP) BW GH GM KE LS MW MZ NA SD SL SZ TZ UG ZM ZW
(EA) AM AZ BY KG KZ MD RU TJ TM
Publication Language: English
Filing Language: English
Fulltext Word Count: 54737

Fulltext Availability:
Detailed Description
Claims

Detailed Description
... a) controlling at least one ulse width using
p
recursive feedback; and (b) driving an **electrode** means using the **pulse width** to thereby control a light **modulating** element of an array of light modulating elements.

[111 According to a third broad aspect...

...for controlling at least one pulse width using recursive feedback; and means for driving an **electrode** means using the **pulse width** to thereby control a light **modulating** element of an array of light modulating elements.

[121 According to a fourth broad aspect...backplane, the bandwidth to the backplane and inside the backplane, and processing hardware when generating **pulse width modulated** signats on the display **electrodes**
.

(1781 The general concept of digital LCoS devices has been known for well over 10...backplane, the bandwidth to the backplane and inside the backplane, and processing hardware when generating **pulse width modulated** signals on display **electrodes** .

[1921 Furthermore in one embodiment of the present invention, rather than using a 2-bit...

Claim
... steps:
(a) controlling at least one pulse width using recursive feedback; and
(b) driving an **electrode** means using said **pulse width** to thereby control a light **modulating** element of an array of light modulating elements.

17 The method of claim 16, wherein...

...for controlling at least one pulse width using recursive feedback; and means for driving an **electrode** means using said **pulse width** to thereby control a light **modulating** element of an array of light modulating elements.

31 A device comprising:
an array of...

9/3,K/2 (Item 2 from file: 349)
DIALOG(R)File 349:PCT FULLTEXT

00854003 **Image available**
MULTI-CHANNEL RF ENERGY DELIVERY WITH COAGULUM REDUCTION
APPORT D'ENERGIE HF MULTICANAUX AVEC REDUCTION DE CAILLOT
Patent Applicant/Assignee:
CARDIMA INC, 47266 Benicia Street, Fremont, CA 94538-7330, US, US (Residence), US (Nationality), (For all designated states except: US)
Patent Applicant/Inventor:
NASAB Mohsen, 4719 Malero Place, San Jose, CA 95129, US, US (Residence), IR (Nationality), (Designated only for: US)
CHAN Eric K Y, 36276 Worthing Drive, Newark, CA 94560, US, US (Residence), SG (Nationality), (Designated only for: US)
Legal Representative:
SAMPLES Kenneth H (et al) (agent), Fitch, Even, Tabin & Flannery, Suite 1600, 120 South LaSalle Street, Chicago, IL 60603, US,
Patent and Priority Information (Country, Number, Date):
Patent: WO 200187172 A1 20011122 (WO 0187172)
Application: WO 2001US15346 20010514 (PCT/WO US0115346)
Priority Application: US 2000203847 20000512
Designated States:
(Protection type is "patent" unless otherwise stated - for applications prior to 2004)
AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CO CR CU CZ DE DK DM DZ EC EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NO NZ PL PT RO RU SD SE SG SI SK SL TJ TM TR TT TZ UA UG US UZ VN YU ZA ZW
(EP) AT BE CH CY DE DK ES FI FR GB GR IE IT LU MC NL PT SE TR
(OA) BF BJ CF CG CI CM GA GN GW ML MR NE SN TD TG
(AP) GH GM KE LS MW MZ SD SL SZ TZ UG ZW
(EA) AM AZ BY KG KZ MD RU TJ TM
Publication Language: English

Filing Language: English
Fulltext Word Count: 9688

Fulltext Availability:
Detailed Description

Detailed Description
... unit (ACU), the system continuously monitors and adjusts the precise RF energy delivered to each **electrode** .

The following are features of the **pulse width modulation** implementation for the systern: (1) soft start power-on operation; (2) compensation for the lag...

17/3,K/1 (Item 1 from file: 348)
DIALOG(R)File 348:EUROPEAN PATENTS

01361581
Shift register and electronic apparatus
Schieberegister und elektronisches Gerat
Registre a decalage et appareil electronique
PATENT ASSIGNEE:
Casio Computer Co., Ltd., (249366), 6-2, Hon-machi 1-chome, Shibuya-ku, Tokyo, (JP), (Applicant designated States: all)
INVENTOR:
Kanbara, Minoru, Patent Dpt., Dvpt Div., Hamura, R&D Center, Casio Computer Co,Ltd, 3-2-1,Sakae-cho, Hamura-shi, Tokyo 205-8555, (JP)
Sasaki, Kazuhiro, Patent Dpt.,Dvpt. Div., Hamura, R&D Center, Casio Computer Co,Ltd, 3-2-1,Sakae-cho, Hamura-shi, Tokyo 205-8555, (JP)
Morosawa,Katsuhiko, Patent Dpt., Dvpt Div., Hamura, R&D Center, Casio Computer Co,Ltd, 3-2-1,Sakae-cho, Hamura-shi, Tokyo 205-8555, (JP)
LEGAL REPRESENTATIVE:
Grunecker, Kinkeldey, Stockmair & Schwanhausser Anwaltssozietat (100721), Maximilianstrasse 58, 80538 Munchen, (DE)
PATENT (CC, No, Kind, Date): EP 1160796 A2 011205 (Basic)
EP 1160796 A3 040519
APPLICATION (CC, No, Date): EP 2001113220 010530;
PRIORITY (CC, No, Date): JP 2000162671 000531; JP 2000169002 000606; JP 2001128909 010426
DESIGNATED STATES: DE; FR; GB
EXTENDED DESIGNATED STATES: AL; LT; LV; MK; RO; SI
INTERNATIONAL PATENT CLASS (V7): G11C-019/28; **G09G-003/36**
ABSTRACT WORD COUNT: 68
NOTE:
Figure number on first page: 11

LANGUAGE (Publication,Procedural,Application): English; English; English
FULLTEXT AVAILABILITY:

Available Text	Language	Update	Word Count
CLAIMS A	(English)	200149	2659
SPEC A	(English)	200149	21274
Total word count - document A			23933
Total word count - document B			0
Total word count - documents A + B			23933

...INTERNATIONAL PATENT CLASS (V7): **G09G-003/36**

...SPECIFICATION camera, the shift register described in the second embodiment can be used as the gate **driver** for the liquid crystal **display** to **display** an **mirror image** .
As described above, in the shift register according to the present invention, fluctuations in the...

17/3,K/2 (Item 2 from file: 348)
DIALOG(R)File 348:EUROPEAN PATENTS

01089273
Bi-directional shift register without stage to stage signal attenuation suitable as driving circuit for a display device and associated image sensing apparatus
Bidirektionales Schieberegister ohne zwischenstufige Signalabschwachung,

geeignet als Steuerschaltung fur eine Anzeigevorrichtung und zugehoriges Bildaufnahmegerat

Registre a decalage bidirectionnel sans attenuation de signaux entre les etages utilisable comme circuit de commande pour un dispositif d'affichage et appareil de prise d'image associe

PATENT ASSIGNEE:
Casio Computer Co., Ltd., (249366), 6-2, Hon-machi 1-chome, Shibuya-ku, Tokyo, (JP), (Proprietor designated states: all)

INVENTOR:
Kanbara, Minoru, c/o Pat. Dept., Hamura R&D Center, Casio Computer CO., LTD., 3-2-1, Sakae-cho, Hamura-shi, Tokyo 205-8555, (JP)

LEGAL REPRESENTATIVE:
Grunecker, Kinkeldey, Stockmair & Schwanhausser Anwaltssozietat (100721), Maximilianstrasse 58, 80538 Munchen, (DE)

PATENT (CC, No, Kind, Date): EP 957491 A1 991117 (Basic)
EP 957491 B1 050713

APPLICATION (CC, No, Date): EP 99109526 990512;

PRIORITY (CC, No, Date): JP 98148306 980514; JP 98361967 981207

DESIGNATED STATES: DE; FR; NL

EXTENDED DESIGNATED STATES: AL; LT; LV; MK; RO; SI

INTERNATIONAL PATENT CLASS (V7): G11C-019/28; **G09G-003/36**

ABSTRACT WORD COUNT: 74

NOTE:
Figure number on first page: 1

LANGUAGE (Publication,Procedural,Application): English; English; English

FULLTEXT AVAILABILITY:

Available Text	Language	Update	Word Count
CLAIMS A	(English)	199946	2401
CLAIMS B	(English)	200528	1413
CLAIMS B	(German)	200528	1215
CLAIMS B	(French)	200528	1570
SPEC A	(English)	199946	17157
SPEC B	(English)	200528	16778
Total word count - document A			19561
Total word count - document B			20976
Total word count - documents A + B			40537

...INTERNATIONAL PATENT CLASS (V7): **G09G-003/36**

...SPECIFICATION liquid crystal display device as a viewfinder. In this case as well, when the gate **driver** described in the third or seventh embodiment is used, a **mirror image** can be **displayed** . When the gate **driver** and drain **driver** 104 described in the fourth or eighth embodiment are used, an image can be displayed...

...SPECIFICATION liquid crystal display device as a viewfinder. In this case as well, when the gate **driver** described in the third or seventh embodiment is used, a **mirror image** can be **displayed** . When the gate **driver** and drain **driver** 104 described in the fourth or eighth embodiment are used, an image can be displayed...

17/3,K/3 (Item 1 from file: 349)

DIALOG(R)File 349:PCT FULLTEXT

01137456 **Image available**

ACCESSORY SYSTEM FOR VEHICLE

SYSTEME D'ACCESSOIRE POUR VEHICULE

Patent Applicant/Assignee:

DONNELLY CORPORATION, 414 East Fortieth Street, Holland, MI 49423, US, US (Residence), US (Nationality), (For all designated states except: US)
Patent Applicant/Inventor:
HUTZEL Barry W, 2058 Breeze Drive, Holland, MI 49424, US, US (Residence), US (Nationality), (Designated only for: US)
TAYLOR David W, 75 Chateau Du Lac, Fenton, MI 48430, US, US (Residence), US (Nationality), (Designated only for: US)
SCHOFIELD Kenneth, 4793 Crestridge Court, Holland, MI 49423, US, US (Residence), GB (Nationality), (Designated only for: US)
WHITEHEAD Peter J, 345 Sandcastle Drive, Holland, MI 49424, US, US (Residence), GB (Nationality), (Designated only for: US)
DEWIND Darryl P, 7030 120th Avenue, Holland, MI 49424, US, US (Residence), US (Nationality), (Designated only for: US)
WEBER Richard J, 14654 Pine Island Drive, Grand Haven, MI 49417, US, US (Residence), US (Nationality), (Designated only for: US)
LYNAM Niall R, 248 Foxdown, Holland, MI 49424, US, US (Residence), US (Nationality), (Designated only for: US)
Legal Representative:
VAN DYKE GARDNER LINN & BURKHART LLP (agent), FLORY, Timothy A.; VAN DYKE, Daniel; GARDNER, Donald S.; LINN, Terence J.; BURKHART, Frederick S.; and COLLINS, Catherine S., 2851 Charlevoix Drive SE, Suite 207, P.O. Box 888695, Grand Rapids, MI 49588-, US,
Patent and Priority Information (Country, Number, Date):
Patent: WO 200458540 A2-A3 20040715 (WO 0458540)
Application: WO 2003US40611 20031219 (PCT/WO US03040611)
Priority Application: US 2002435554 20021220; US 2003439626 20030113; US 2003489812 20030724; US 2003492225 20030801
Designated States:
(Protection type is "patent" unless otherwise stated - for applications prior to 2004)
AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CO CR CU CZ DE DK DM DZ EC EE EG ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NI NO NZ OM PG PH PL PT RO RU SC SD SE SG SK SL SY TJ TM TN TR TT TZ UA UG US UZ VC VN YU ZA ZM ZW
(EP) AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IT LU MC NL PT RO SE SI SK TR
(OA) BF BJ CF CG CI CM GA GN GQ GW ML MR NE SN TD TG
(AP) BW GH GM KE LS MW MZ SD SL SZ TZ UG ZM ZW
(EA) AM AZ BY KG KZ MD RU TJ TM
Publication Language: English
Filing Language: English
Fulltext Word Count: 36999

Main International Patent Class (v7): **G09G-003/34**
Fulltext Availability:
Detailed Description

Detailed Description
... video display screen to the extended, use position. Pressing laterally inward or pushing the video **display** screen into the **mirror** casing to the non-use position may then **latch** or secure the **video display** screen in the non-use position substantially within the mirror casing.

The mirror assembly may...mirror assembly.

Optionally, the passenger side video display screen may be pivotable relative to the **mirror** casing to further angle the **video display** screen toward the **driver** to enhance the viewing of the video display screen. Thus, compared to mirror assemblies that...

23/3,K/1 **(Item 1 from file: 349)**
DIALOG(R)File 349:PCT FULLTEXT

01296294 **Image available**
A PIXEL CELL VOLTAGE CONTROL CIRCUIT
CIRCUIT DE COMMANDE DE LA TENSION DE CELLULES DE PIXELS
Patent Applicant/Assignee:
eLCOS MICRODISPLAY TECHNOLOGY INC, 1290 Oakmead Parkway, Suite 201, Sunnyvale, CA 94086, US, US (Residence), US (Nationality)
Inventor(s):
HUDSON Edwin Lyle, 501 Valley View Drive, Los Altos, CA 94024, US,
Legal Representative:
LIN Bo-In (agent), 13445 Mandoli Drive, Los Altos Hills, CA 94022, US,
Patent and Priority Information (Country, Number, Date):
Patent: WO 2005104071 A1 20051103 (WO 05104071)
Application: WO 2003US41386 20031223 (PCT/WO US03041386)
Priority Application: US 2002329645 20021226; US 2003413649 20030415
Designated States:
(Protection type is "patent" unless otherwise stated - for applications prior to 2004)
AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CO CR CU CZ DE DK DM DZ EC EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NI NO NZ OM PG PH PL PT RO RU SC SD SE SG SK SL SY TJ TM TN TR TT TZ UA UG UZ VC VN YU ZA ZM ZW
(EP) AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IT LU MC NL PT RO SE SI SK TR
(OA) BF BJ CF CG CI CM GA GN GQ GW ML MR NE SN TD TG
(AP) BW GH GM KE LS MW MZ SD SL SZ TZ UG ZM ZW
(EA) AM AZ BY KG KZ MD RU TJ TM
Publication Language: English
Filing Language: English
Fulltext Word Count: 14789

Fulltext Availability:
Detailed Description
Claims

English Abstract
A pixel **display** configuration by providing a voltage controller (320) in each pixel control circuit (205) controlling the...

...a turning off of another stage with sufficient delay for loading a predefined set of **display** data for preventing turning one of both the first and second switching stages. The rate...

Detailed Description
... 1. Field of the Invention
The present invention pertains to liquid crystal on silicon (LCOS) **displays** , and more particularly to improved pixel cell design for liquid crystal on silicon **displays** with enhanced voltage control and simplified circuit to achieve prior to **display** frame data loading.

2. DescKiption of the Prior Art
Liquid crystal on silicon (LCOS) microdisplay...

...example, in order to achieve savings on power consumption and prolong the life of a **display** system, it is desirable to have a way of inverting the voltage applied to the...

...multiplexer to the pixel mirror. Limited by these technical difficulties, the conventional technologies of LCOS **display** are provide **displays** of higher quality only with difficulty. Specifically, the **displays** are often hindered by problems of image sticking and flicker due to the low DC balancing rates as will be further explained below.

Liquid crystal **display** (**LCD**) technology has progressed rapidly in recent
years, and has become an increasingly common option for **display** systems. **LCD** ' s make up the largest portion of the flat **panel** **display** market. This market dominance is expected to continue into the future. The superior characteristics of liquid crystal **displays** with regard to weight, power, and geometry in image visualization, have enabled them to compete...

...definition television systems, desktop computers, projection equipment, and large information boards. As the cost of **LCD** systems continues to fall, i.e., is predicted that they will eventually take over the...

...high power consumption. These
disadvantages are clearly evident when comparing the features of CRT and **LCD** projection **displays** with similar characteristics. In general, projection **display** systems offer several additional advantages over CRT systems. First, projection **display** systems offer the possibility of using large screens for group viewing with the ability to easily change the image size and position. Second, projection **display** systems offer high performance, and the ability to accept image data input from. a variety...

...projection systems has further attractive features such as high brightness, high resolution, and easy maintenance. **LCD** front projection **displays** provide higher resolution and brightness than comparable CRT-based systems. In comparison with CRT's, installation of **LCD** projection systems is easy and their viewing angles are generally much wider. Most front projection **LCD** **display** systems are compatible with personal computers and can operate with video signals from television systems. **LCD** front projectors are easily adapted for applications such as home theaters.

Typically, **LCD** projection systems include small **LCD** panels, usually

25/3,K/1 (Item 1 from file: 348)
DIALOG(R)File 348:EUROPEAN PATENTS

00838498
APPARATUS AND METHOD FOR DISPLAYING BINARY IMAGES
VORRICHTUNG UND VERFAHREN ZUR ANZEIGE VON BINAREN BILDERN
APPAREIL ET PROCEDE POUR L'AFFICHAGE D'IMAGES BINAIRES
PATENT ASSIGNEE:
INTEL CORPORATION, (322933), 2200 Mission College Boulevard, Santa Clara, CA 95052, (US), (Proprietor designated states: all)
INVENTOR:
McKNIGHT, Douglas, 4390 Comanche Drive, Boulder, CO 80303, (US)
LEGAL REPRESENTATIVE:
Dunlop, Hugh Christopher (59552), R G C Jenkins & Co. 26 Caxton Street, London SW1H 0RJ, (GB)
PATENT (CC, No, Kind, Date): EP 846316 A1 980610 (Basic)
EP 846316 B1 051102
WO 1997004436 970206
APPLICATION (CC, No, Date): EP 96925289 960718; WO 96US11532 960718
PRIORITY (CC, No, Date): US 505654 950720; US 605999 960209
DESIGNATED STATES: AT; BE; CH; DE; DK; ES; FI; FR; GB; GR; IE; IT; LI; LU; MC; NL; PT; SE
EXTENDED DESIGNATED STATES: AL; LT; LV; SI
RELATED DIVISIONAL NUMBER(S) - PN (AN):
(EP 2005017023)
INTERNATIONAL PATENT CLASS (V7): **G09G-003/20**
NOTE:
No A-document published by EPO
LANGUAGE (Publication,Procedural,Application): English; English; English
FULLTEXT AVAILABILITY:

Available Text	Language	Update	Word Count
CLAIMS B	(English)	200544	627
CLAIMS B	(German)	200544	566
CLAIMS B	(French)	200544	683
SPEC B	(English)	200544	11665
Total word count - document A			0
Total word count - document B			13541
Total word count - documents A + B			13541

INTERNATIONAL PATENT CLASS (V7): **G09G-003/20**

...SPECIFICATION images. This integration phenomenon is of particular interest with the arrival of high speed binary **displays** . Such devices are used, for example, in projection **display** systems, head-up **displays** and head mounted **displays** . There exist small fast high resolution **displays** which are essentially binary in nature such as the Digital Mirror Device (DMD), made by Texas Instruments, active matrix electro-luminescence (AMEL) field emission **display** (FED) as well as actively addressed ferro-electric liquid crystal devices. These technologies are capable...

...well as each individual frame is actually a series of bits which must eventually be **displayed** in order to make it possible for the person viewing the binary images to perform...

...general, and P1-P4, in particular, as representative pixels. As each frame F1-Fm is **displayed** for a time t, some of the pixels Pj will be a logical 1 and...

...0. In order for a person to view images produced by frames F1-Fm, a **display** device is required.

A problem with the above approach is that a **display** device which **displays** the group of binary images 105 must be capable of responding in the time t (which relates to the frame rate 1/t). This places a limitation on which **displays** can be used. Namely, only those **display** devices can be used which have response rates at least as great as 1/t...

...or frames per second. However, the integration process requires that t be small, otherwise the **display** would appear to flicker and not appear to provide a grey-scale.

Currently, there are a variety of **display** devices which might be used to output the above discussed subframes. Liquid crystal on silicon (LCOS) devices which have been designed as **displays** (or spatial light modulators) have used pixel designs which can be categorized as being either...

...the stored charge, analogous to DRAM (dynamic random access memory).

Both of these types of **displays** share the property that as the array of pixels is addressed in sequence, row-at...

...new data immediately once the row is addressed. It happens that for reasonably high resolution **displays** , such as 1024 by 1024 pixels, the electronic refresh time is comparable or longer than the liquid crystal switching time. For example, if data is supplied to the **display** through 32 data wires running at 50M bits/sec, such an array of pixels takes...

...The liquid crystal switches in approximately 100 microseconds. It is valid, therefore, to view the **display** as being updated in a sweeping motion across its area.

In some applications, it would be advantageous to have the data on all of the **display** be simultaneously valid before it can be usefully viewed. Examples of such applications include most coherent applications such as optical correlators, optical beam steerers etc..., and **display** applications where precise synchronization with other parts of the system, such as an illuminated source, is required.

Current pixel designs using liquid crystal **displays** or microdisplays fall into two major categories, namely, single transistor pixel systems and static pixel...

...type computer screens as well as in some silicon backplane microdisplays which use liquid crystal **displays** . The entire array of pixels is formed such that all of the pixels circuits 701 in a row of the **display** share a gate wire 705 and all of the pixel circuits in a column share...

...pixel circuit 701 includes a transistor 714 and a pixel mirror or window electrode 718.

Displays using circuit 701 are updated a row-at-a-time. In particular, gate wire 705 is activated, thereby activating all transistors 714 on a single row of pixels on the **display** . Upon activation of gate wire 705, charge flows through transistor 714, thereby bringing the pixel...

...two Values--typically OV and 5 V. It must be noted, however, that this pixel **display** approach is not a frame-buffer pixel.

That is, the pixel mirrors 718 are updated...

...other type of pixel design that has been used is the so-called static pixel **displays** . Static pixel **displays** use pixels which contain a data-latch and possibly other circuitry. This approach has been...

...store data and hence, the data is stored indefinitely without refresh. Output 740 of data **latch** 732 can be directly connected to **pixel mirror** 718 or connected to an exclusive-or (X-OR) 750 (as shown) or an exclusive...

...with the data bit stored in latch 732. For example, all pixels in the static **display** device that have a "1" stored in latch 732 take the opposite logic value of global clock signal 755, whereas all pixels in the static **display** device that have a "0" stored in latch 732 take the same logic value as...

25/3,K/2 (Item 1 from file: 349)
DIALOG(R)File 349:PCT FULLTEXT

00364111 **Image available**
APPARATUS AND METHOD FOR DISPLAYING BINARY IMAGES
APPAREIL ET PROCEDE POUR L'AFFICHAGE D'IMAGES BINAIRES
Patent Applicant/Assignee:
McKNIGHT Douglas,
Inventor(s):
McKNIGHT Douglas,
Patent and Priority Information (Country, Number, Date):
Patent: WO 9704436 A1 19970206
Application: WO 96US11532 19960718 (PCT/WO US9611532)
Priority Application: US 95505654 19950720; US 96605999 19960209
Designated States:
(Protection type is "patent" unless otherwise stated - for applications prior to 2004)
AL AM AT AU AZ BB BG BR BY CA CH CN CZ DE DK EE ES FI GB GE HU IL IS JP KE KG KP KR KZ LK LR LS LT LU LV MD MG MK MN MW MX NO NZ PL PT RO RU SD SE SG SI SK TJ TM TR TT UA UG UZ VN KE LS MW SD SZ UG AM AZ BY KG KZ MD RU TJ TM AT BE CH DE DK ES FI FR GB GR IE IT LU MC NL PT SE BF BJ CF CG CI CM GA GN ML MR NE SN TD TG
Publication Language: English
Fulltext Word Count: 18407
Main International Patent Class (v7): **G09G-003/36**
International Patent Class (v7): **G09G-05:04** ...

... **G09G-05:10**
Fulltext Availability:
Detailed Description
Claims

English Abstract
A device such as a **display** device (115, 505) or a spatial light modulator can store pixel data in a plurality...

Detailed Description
... images. This integration phenomenon is of particular interest with the arrival of high speed binary **displays** . Such devices are used, for example, in projection **display** systems, head-up **displays** and head mounted **displays** . There exist small fast high resolution **displays** which are essentially binary in nature such as the Digital Mirror Device (DMD), made by Texas Instruments, active matrix electro-luminescence (AMEL) field emission **display** (FED) as well as actively addressed ferro-electric liquid crystal devices. These technologies are capable...

...well as
each individual frame is actually a series of bits which must eventually be **displayed** in order to make it possible for the person viewing the binary images to perform...

...general,
and P1-P4, in particular, as representative pixels. As each frame F1-Fm is **displayed** for a time t, some of the pixels Pj will be a logical 1 and...
...0. In order for a
person to view images produced by frames F1-Fm, a **display** device is required.

A problem with the above approach is that a **display** device which **displays** the group of binary images 105 must be capable of responding in the time t (which relates to the frame rate 1/t).

This places a limitation on which **displays** can be used. Namely, only those **display** devices can be used which have response rates at least as great as 1/t...

...or frames per second. However, the integration process requires that t be small, otherwise the **display** would appear to flicker and not appear to provide a greyscale.

Currently, there are a variety of **display** devices ...the above discussed subframes. Liquid crystal on silicon (LCOS) devices which have been designed as **displays** (or spatial light modulators) have used pixel designs which can be categorized as being either...

...the stored charge, analogous to DRAM (dynamic random access memory).

Both of these types of **displays** share the property that as the array of pixels is addressed in sequence, row-at...

...new data immediately once the row is addressed. It happens that for reasonably high resolution **displays**, such as 1024 by 1024 pixels, the electronic refresh time is comparable or longer than the liquid crystal switching time. For example, if data is supplied to the **display** through 32 data wires running at 50M bits/sec, such an array of pixels takes...

...The liquid crystal switches in approximately 100 microseconds. it is valid, therefore, to view the **display** as being updated in a sweeping motion across its area.

In some applications, it would be advantageous to have the data on all of the **display** be simultaneously valid before it can be usefully viewed. Examples of such applications include most coherent applications such as optical correlators, optical beam steerers etc... g, and **display** applications where precise synchronization with other parts of the system, such as an illuminated source, is required.

Current pixel designs using liquid crystal **displays** or microdisplays fall into two major categories, namely, single 3 transistor pixel systems and static...

...computer screens as well as in some si licon backplane microdisplays which use liquid crystal **displays**. The entire array of pixels is formed such that all of the pixels circuits 701 in a row of the **display** share a gate wire 705 and all of the pixel circuits in a column share...

...pixel circuit 701 includes a transistor 714 and a pixel mirror or window electrode 718.

Displays using circuit 701 are updated a row-at-a-time. In

particular, gate wire 705 is activated, thereby activating all transistors 714 on a single row of pixels on the **display** . Upon activation of gate wire 705,, charge flows through transistor 714,' thereby bringing the pixel...two values--typically OV and 5 V, It must be noted, however,
that this pixel **display** approach is not a frame-buffer pixel as called for in the parent application to...

26/3,K/1 (Item 1 from file: 348)
DIALOG(R)File 348:EUROPEAN PATENTS

00333598
MULTIPLEXED ARRAY EXPOSING SYSTEM HAVING EQUI-ANGULAR SCAN EXPOSURE REGIONS.
SYSTEM ZUR MULTIPLEXIERTEN BELICHTUNG EINES FELDES MIT REGIONEN, DEREN BELICHTUNG GLEICHWINKLIG ABGELENKT IST.
SYSTEME D'EXPOSITION A RESEAU MULTIPLEXE AYANT DES REGIONS D'EXPOSITION A BALAYAGE EQUIANGLE.

PATENT ASSIGNEE:
EASTMAN KODAK COMPANY (a New Jersey corporation), (201210), 343 State Street, Rochester New York 14650, (US), (applicant designated states: DE;FR;GB;NL)
INVENTOR:
AGOSTINELLI, Joseph, Alfonse, 24 Old Stone Lane, Rochester, NY 14615, (US)
MIR, Jose, Manuel, 1035 W. High Vista Trail, Webster, NY 14580, (US)
LEGAL REPRESENTATIVE:
Buff, Michel et al (14411), Kodak-Pathe Departement des Brevets et Licences CRT Centre de Recherches et de Technologie Zone Industrielle, F-71102 Chalon sur Saone Cedex, (FR)
PATENT (CC, No, Kind, Date): EP 333840 A1 890927 (Basic)
EP 333840 B1 930714
WO 8903149 890406
APPLICATION (CC, No, Date): EP 88909038 880915; WO 88US3148 880915
PRIORITY (CC, No, Date): US 100059 870923
DESIGNATED STATES: DE; FR; GB; NL
INTERNATIONAL PATENT CLASS (V7): H04N-001/40; H04N-001/387;
ABSTRACT WORD COUNT: 94
NOTE:
No A-document published by EPO

LANGUAGE (Publication,Procedural,Application): English; English; English
FULLTEXT AVAILABILITY:

Available Text	Language	Update	Word Count
CLAIMS B	(English)	EPBBF1	241
CLAIMS B	(German)	EPBBF1	145
CLAIMS B	(French)	EPBBF1	201
SPEC B	(English)	EPBBF1	2869
Total word count - document A			0
Total word count - document B			3456
Total word count - documents A + B			3456

...SPECIFICATION 20. The light valve array 20, shown in more detail in Figure 2, also comprises **an** electro-optic **panel** 29, which is sandwiched between ingress polarizer 23 and egress **polarizer** 25. The **panel** 29 is formed to have a plurality of discrete exposure portions by construction of spaced...

...selective application of an electrical field in a direction transverse to the direction of light **passing** through the **panel** . Such light valve structures are known in the art, e.g. see U.S. Patent...

...such arrays function with the directions of the polarizers 23, 24 at 90(degree) relative **to** each other, and the electro-optic **panel** 29 (e.g. formed of PLZT material) is adapted to change the polarization direction of...cause the electro-optic material therebetween to change the direction of polarized light from ingress **polarizer** 23 by

90(degree); therefore such **modulated** light will pass **through** egress polarizer 24. When the address **electrode** 25 of an array pixel portion is not energized, there will be no change in **the** polarization of light passing that modulator **panel** portion and such light will be blocked by the egress polarizer. In the Figures 1...

...transparent portions. In another preferred embodiment (not shown), the mask layer 28 is formed directly **on** the egress surface of the modulator **panel** 29, which obviates alignment problems.
While the embodiments of the present invention employ illuminated PLZT ...sub 4)(sub -)(sub 1). At the appropriate sequence signal from detector 46 (indicating that **mirror** 51 **is** in the position to address those **pixel portions**), the gates are signalled to operate drivers for sources L(sub 1)-L(sub 4...

...sub 3)(sub -)(sub 2) and P(sub 4)(sub -)(sub 2) are loaded into **the** gates and **await** the signal from **driver** control that **mirror** 51 has moved to the next appropriate pixel address location. This sequence progresses until each sector...

26/3,K/2 (Item 2 from file: 348)
DIALOG(R)File 348:EUROPEAN PATENTS

00333590
MULTICOLOR LIGHT VALVE IMAGING APPARATUS HAVING ELECTRODE CONSTRUCTIONS FOR UNIFORM TRANSMISSION.
VIELFARBIGE LICHTVENTILABBILDUNGSVORRICHTUNG MIT ELEKTRODENKONSTRUKTION ZUR GLEICHFORMIGEN UBERTRAGUNG.
APPAREIL DE FORMATION D'IMAGES A VALVE DE LUMIERE MULTICOLORE AYANT DES CONSTRUCTIONS D'ELECTRODE PERMETTANT UNE TRANSMISSION UNIFORME.
PATENT ASSIGNEE:
EASTMAN KODAK COMPANY (a New Jersey corporation), (201210), 343 State Street, Rochester New York 14650, (US), (applicant designated states: DE;FR;GB;NL)
INVENTOR:
AGOSTINELLI, Joseph, Alphonse, 24 Old Stone Lane, Rochester, NY 14615, (US)
MIR, Jose, Manuel, 1035 W. High Vista Trail, Webster, NY 14580, (US)
LEGAL REPRESENTATIVE:
Buff, Michel et al (14411), Kodak-Pathe Departement des Brevets et Licences CRT Centre de Recherches et de Technologie Zone Industrielle, F-71102 Chalon sur Saone Cedex, (FR)
PATENT (CC, No, Kind, Date): EP 331722 A1 890913 (Basic)
EP 331722 B1 930901
WO 8903060 890406
APPLICATION (CC, No, Date): EP 88909026 880915; WO 88US3147 880915
PRIORITY (CC, No, Date): US 100058 870923
DESIGNATED STATES: DE; FR; GB; NL
INTERNATIONAL PATENT CLASS (V7): G02F-001/01;
ABSTRACT WORD COUNT: 104
NOTE:
No A-document published by EPO

LANGUAGE (Publication,Procedural,Application): English; English; English
FULLTEXT AVAILABILITY:

Available Text	Language	Update	Word Count
CLAIMS B	(English)	EPBBF1	407
CLAIMS B	(German)	EPBBF1	359

CLAIMS B	(French)	EPBBF1	437
SPEC B	(English)	EPBBF1	3618
Total word count - document A			0
Total word count - document B			4821
Total word count - documents A + B			4821

...ABSTRACT a light valve imaging system to image print media with different light colors comprising a **panel** (29) of electro-optic material of the type which changes the polarization of transmitted light ...

...an electric field and a plurality of electrode pairs (25, 26), linearly spaced along the **panel** to define an array of **modulator** gap portions between respective **electrode** pairs. The **modulator** gap portions associated with different color filters have a different dimension selected respectively to effect...

...SPECIFICATION improvements for multicolor light valve imaging apparatus of the type including (i) an isotropic-birefringent **modulator panel** with sandwiching polarizer **and analyzer** elements, (ii) **electrode** means dividing the **panel into** a plurality of **selectively** addressable pixel portions, (iii) a plurality of different color filter elements arranged to light filtering...

...iv) light source means for directing multicolor light through the modulator and polarizer, analyzer and **filter** elements and (v) means for addressing the **electrodes** to selectively apply voltage across the pixel portions. Such improvement involve (a) the electrode-defined...

...constructed to apply such substantially equal half-wave voltage across all pixel portions of the **panel** . In one preferred constitution **of** the invention, the **modulator electrode** structure is varied **by providing** different spacings between reference and address **electrodes** , respectively for each different color group.

Brief Description of the Drawings

The subsequent description of...valve array 20, shown in more detail in Figure 2, also comprises an electro-optic **panel** 29, which is sandwiched **between** ingress polarizer 23 and egress polarizer 25. The **panel** 29 is formed to **have** a plurality of discrete exposure portions by construction of spaced electrode structures 25, 26 in...

...an electrical field in a direction transverse to the direction of light passing through the **panel** . Such light valve structures **are** known in the art, e.g. see U.S. Patent Nos. 4,371,892 and...

...the polarizers 23, 24 at 90(degree) relative to each other, and the electro-optic **panel** 29 (e.g. formed **of** PLZT material) is adapted to change the polarization direction of passing light by 90(degree...

...change the direction of polarized light from ingress polarizer 23 by 90(degree); therefore such **modulated** light will pass through **egress** polarizer 24. When the address **electrode** 25 of an array **pixel** portion is not energized, there will be no change in the polarization of light passing that modulator **panel** portion and such light **will** be blocked by the egress polarizer. In the Figures 1 and 2 embodiment a mask...

...shown), the mask layer 28 is formed directly on the egress surface of the modulator **panel** 29, which obviates alignment **problems** . While the foregoing system employs a mirror 51 mounted on a bimorph bender element 52...sub 4)(sub -)(sub 2) are loaded into the gates and await the signal

from **driver** control that **mirror** 51 **has** moved to **the** next appropriate **pixel** address location. This sequence progresses until each sector has all pixel portions address and stage...employed our observation that half-wave voltage of individual modulator portions of a light valve **modulator panel** is a function **of what** we term the "gap- **electrode** aspect ratio." This parameter **of** a **modulator** portion is a function **of** the gap width between address and reference **electrodes** and the combined width of those electrodes according to the following relation: aspect ratio = gap...

...gap width (g) and 1/2 the two combined widths We of the pair of **electrodes** bordering the gap.

Construction **of** multicolor **modulators** arrays, having a common **half** -wave voltage, in accordance with the present invention can be effected in one preferred mode...

...linear array geometry; whereas birefringence measurements used in the model were made on an unclamped **modulator** having a parallel plate **electrode** structure.

Thus when light **valve** devices are constructed using calculated unclamped **modulators** , the final array operating voltage should be determined by applying different voltage levels until maximum...

...CLAIMS 1. Multicolor light valve imaging apparatus (70) of the type including (i) an electro-optic **modulator panel** (29), comprising a material which transforms from **an** isotropic, non-polar **state** to a birefringent polar state in response to application of an electric field, with sandwiching polarizer (23) and analyser (24) elements, (ii) electrode means dividing said **panel** into an array comprising a plurality of selectively addressable pixel portions, (iii) a plurality of...

...respective pixel portions, (iv) light source means (21, 22) for directing multicolor light through said **modulator** and **polarizer** , analyzer and filter elements and (v) means (27, 60) for addressing said electrodes to selectively...

...different electrode constructions (25', 26') respectively for each different color of filter elements, said electrode **constructions** comprising different gaps between electrodes, so that the half-wave voltage for each pixel portion...

...constructed to apply such substantially equal half-wave voltage across all pixel portions of said **panel** .

2. The apparatus defined in claim 1 wherein said different electrode constructions comprise different electrode...

...are substantially equal for each pixel portion of said array.

4. A modulator device for **use** in a light valve imaging system to image print media with different light colors, a **modulator** device comprising :

(a) a **panel** (29, 70) of electro-optic **material** of the type which changes **the** polarization of transmitted light selectively upon application of an electric **field** ; and

(b) a plurality of electrode pairs (25, 26 ; 25', 26'), linearly spaced along said **panel** to define an array of spaced pixel portions on said **panel** **between** respective **electrode** pairs, said **modulator** device being characterized by at least two of said pixel portions having a different gap...

...transmission for different light colors when addressed by the same half-wave voltages.

5. The **modulator** defined in claim 4 wherein the **electrodes** corresponding to said pixel portions having a different gap dimension (g) between their defining **electrodes** present different widths (We) of their defining **electrodes** .

6. The **modulator** defined in claim 5 wherein the center-to-center spacing between array pixel portions is...

...CLAIMS panneau pour definir un ensemble de pixels espaces sur ledit panneau entre les paires d' **electrodes** respectives, ledit **modulateur** etant caracterise en ce que au moins deux desdits pixels presentent des espaces (g) entre...

...maximale pour des lumieres de couleur differente lorsqu'on applique le meme potentiel demionde.

5. **Modulateur** selon la revendication 4, dans lequel les **electrodes** , correspondant auxdits pixels presentant des espaces (g) entre les electrodes les definissant de dimensions differentes...

26/3,K/3 (Item 3 from file: 348)

00333322

SCAN-MULTIPLEXED LIGHT VALVE PRINTER WITH BAND-REDUCING CONSTRUCTION.
ABTAST-GEMULTIPLEXTE LICHTVENTILDRUCKER MIT STREIFENVERMINDERNDEM AUFBAU.
IMPRIMANTE A VALVES DE LUMIERE MULTIPLEXEES EN EXPLORATION ET A STRUCTURE REDUISANT LA FORMATION DE BANDE.

PATENT ASSIGNEE:
EASTMAN KODAK COMPANY (a New Jersey corporation), (201210), 343 State Street, Rochester New York 14650, (US), (applicant designated states: DE;FR;GB;NL)
INVENTOR:
AGOSTINELLI, Joseph, Alfonse, 24 Old Stone Lane, Rochester, NY 14615, (US)
MIR, Jose, Manuel, 1035 W. High Vista Trail, Webster, NY 14580, (US)
LEGAL REPRESENTATIVE:
Buff, Michel et al (14411), Kodak-Pathe Departement des Brevets et Licences CRT Centre de Recherches et de Technologie Zone Industrielle, F-71102 Chalon sur Saone Cedex, (FR)

PATENT (CC, No, Kind, Date): EP 334928 A1 891004 (Basic)
EP 334928 B1 930714
WO 8903148 890406
APPLICATION (CC, No, Date): EP 88908613 880912; WO 88US3094 880912
PRIORITY (CC, No, Date): US 99954 870923
DESIGNATED STATES: DE; FR; GB; NL
INTERNATIONAL PATENT CLASS (V7): H04N-001/18; G06K-015/12; G02F-001/01;
ABSTRACT WORD COUNT: 82
NOTE:
No A-document published by EPO

LANGUAGE (Publication,Procedural,Application): English; English; English
FULLTEXT AVAILABILITY:

Available Text	Language	Update	Word Count
CLAIMS B	(English)	EPBBF1	182
CLAIMS B	(German)	EPBBF1	160
CLAIMS B	(French)	EPBBF1	203
SPEC B	(English)	EPBBF1	3860
Total word count - document A			0

Total word count - document B 4405
Total word count - documents A + B 4405

...SPECIFICATION source 21 providing uniform illumination to a collimator lens 22, which in turn directs collimated **light** onto the ingress polarizer element 23 of light valve array 20. The light **valve** array 20, shown in more detail in Figure 2, also comprises an electro-optic **panel** 29, which is sandwiched between ingress polarizer 23 and egress polarizer 25. The **panel** 29 is formed to have a plurality of discrete exposure portions by construction **of** spaced electrode structures 25, 26 in a manner which enables selective ...an electrical field in a direction transverse to the direction of light passing through the **panel** . Such light valve structures are known in the art, e.g. see U.S. Patent Nos. US-A- **4** ,371,892 and US-A-4,569,573. In general, such arrays function with the...

...the polarizers 23, 24 at 90(degree) relative to each other, and the electro-optic **panel** 29 (e.g. formed of PLZT material) is adapted to change the polarization direction of...

...other is an address electrode, selectively energizable by driver circuits 27. Thus when the energizable **electrode** 25 **is** energized, the field between it and reference **electrode** 26 will **cause** the electro-optic material therebetween to change the direction of polarized light from ingress polarizer 23 by 90(degree); therefore such **modulated** **light** will pass through egress polarizer 24. When the address **electrode**. 25 of an array pixel portion is not energized, there will be no change in the polarization of light passing that **modulator** **panel** portion and such light will be **blocked** by the egress polarizer. In the Figures 1 and 2 embodiment a mask layer 28 is provided, e.g. formed on egress polarizer 24, and comprises light transparent portions 43a, **aligned** **between** **electrode** pairs, and light opaque portions 43b, interspaced between those transparent portions. In another preferred embodiment...

...shown), the mask layer 28 is formed directly on the egress surface of the modulator **panel** 29, which obviates alignment problems.
While embodiments described above employ illuminated PLZT type light valve...

...43b formed by portions of mask 28.
With a system constructed as described above, the **mirror** drive circuit 53 **and** **driver** control circuit 60 can be coordinated to effect a line exposure in accordance with the...spaced across the L(sub 1) sector of the image zone and the number of **discrete** **pixel** portions within a **sector** should be approximately equal to S W.
Considering the foregoing it can be seen that...

File 9:Business & Industry(R) Jul/1994-2006/Feb 08
(c) 2006 The Gale Group
File 15:ABI/Inform(R) 1971-2006/Feb 09
(c) 2006 ProQuest Info&Learning
File 16:Gale Group PROMT(R) 1990-2006/Feb 08
(c) 2006 The Gale Group
File 20:Dialog Global Reporter 1997-2006/Feb 09
(c) 2006 Dialog
File 47:Gale Group Magazine DB(TM) 1959-2006/Feb 09
(c) 2006 The Gale group
File 75:TGG Management Contents(R) 86-2006/Jan W4
(c) 2006 The Gale Group
File 80:TGG Aerospace/Def.Mkts(R) 1982-2006/Feb 08
(c) 2006 The Gale Group
File 88:Gale Group Business A.R.T.S. 1976-2006/Feb 03
(c) 2006 The Gale Group
File 98:General Sci Abs 1984-2004/Dec
(c) 2005 The HW Wilson Co.
File 112:UBM Industry News 1998-2004/Jan 27
(c) 2004 United Business Media
File 141:Readers Guide 1983-2004/Dec
(c) 2005 The HW Wilson Co
File 148:Gale Group Trade & Industry DB 1976-2006/Feb 09
(c)2006 The Gale Group
File 160:Gale Group PROMT(R) 1972-1989
(c) 1999 The Gale Group
File 275:Gale Group Computer DB(TM) 1983-2006/Feb 08
(c) 2006 The Gale Group
File 264:DIALOG Defense Newsletters 1989-2006/Feb 08
(c) 2006 Dialog
File 484:Periodical Abs Plustext 1986-2006/Feb W1
(c) 2006 ProQuest
File 553:Wilson Bus. Abs. 1982-2004/Dec
(c) 2005 The HW Wilson Co
File 570:Gale Group MARS(R) 1984-2006/Feb 08
(c) 2006 The Gale Group
File 608:KR/T Bus.News. 1992-2006/Feb 09
(c)2006 Knight Ridder/Tribune Bus News
File 620:EIU:Viewswire 2005/Oct 19
(c) 2005 Economist Intelligence Unit
File 613:PR Newswire 1999-2006/Feb 09
(c) 2006 PR Newswire Association Inc
File 621:Gale Group New Prod.Annou.(R) 1985-2006/Feb 09
(c) 2006 The Gale Group
File 623:Business Week 1985-2006/Feb 09
(c) 2006 The McGraw-Hill Companies Inc
File 624:McGraw-Hill Publications 1985-2006/Feb 09
(c) 2006 McGraw-Hill Co. Inc
File 634:San Jose Mercury Jun 1985-2006/Feb 08
(c) 2006 San Jose Mercury News
File 635:Business Dateline(R) 1985-2006/Feb 09
(c) 2006 ProQuest Info&Learning
File 636:Gale Group Newsletter DB(TM) 1987-2006/Feb 08
(c) 2006 The Gale Group
File 647:CMP Computer Fulltext 1988-2006/Feb W3
(c) 2006 CMP Media, LLC
File 696:DIALOG Telecom. Newsletters 1995-2006/Feb 09
(c) 2006 Dialog
File 674:Computer News Fulltext 1989-2005/Oct W2
(c) 2005 IDG Communications
File 810:Business Wire 1986-1999/Feb 28

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        (c) 1999 Business Wire
File 813:PR Newswire 1987-1999/Apr 30
        (c) 1999 PR Newswire Association Inc
File 587:Jane`s Defense&Aerospace 2006/Feb W1
        (c) 2006 Jane`s Information Group

Set     Items   Description
S1   14248666   PIXEL? OR PEL OR (PICTURE OR PIXEL?)()ELEMENT?? OR IMAGE OR
              MOVING()IMAGE?? OR PICTURE? OR PHOTO OR PHOTOS OR PHOTOGRAPH-
             ?? OR VIDEO?? OR VIDEO(3N)DATA OR MOVIE?? OR GRAPHIC?? OR  JP-
             EG OR GIF OR MPEG
S2       8871   (MUX OR (BALANC??? OR FLIP(3N)FLOP)()CIRCUIT? OR DECODER??
             OR DRIVER?? OR LATCH)(10N)MIRROR??
S3       1369   (BACK(3N)(PLANE?? OR PLATE??) OR BACKPLATE?? OR BACKPLANE?-
             ?)(3N)CONTROL?
S4        324   ELECTRODE??(10N)MODULAT?
S5    6953383   DISPLAY?? OR MONITOR?? OR PANEL OR LCD OR LCOS LIQUID()CRY-
             STAL()(DISPLAY OR ON()SILICON)
S6         48   AU=(GUTTAG, K? OR GUTTAG K? OR GUTTAG, A? OR GUTTAG A?)
S7      15587   PULSE()WIDTH
S8      10707   (RECURSIVE OR ALGORITHM? OR PROGRAM?? OR ROUTINE??)(3N)(FE-
             EDBACK?? OR FEED()BACK)
S9        186   S1(3N)S2
S10         0   S9(3N)S3
S11         0   S9 AND S3
S12         0   S9(3N)S4
S13        12   S9(3N)S5
S14         0   S13 AND (S7 OR S8)
S15         6   RD S13  (unique items)
S16         0   S15 NOT (BATTLE OR NIGHT OR POST OR HEAD OR OLYMPIC OR CAR-
             GO)
S17        24   S1(3N)S3
S18         0   S17(3N)S4
S19         0   S17 AND S4
S20         1   S17(3N)S5
S21         0   S17(3N)S7
S22         0   S17 AND S7
S23         0   S17(3N)S8
S24         0   S17 AND S8
S25         0   (S17 OR S9) AND S6
S26        18   RD S17  (unique items)
S27        17   S26 NOT S20
S28        14   S27 NOT PY>2003
S29         0   S28 AND S2
```

20/3,K/1 (Item 1 from file: 621)
DIALOG(R)File 621:Gale Group New Prod.Annou.(R)

01052771 Supplier Number: 40172310 (USE FORMAT 7 FOR FULLTEXT)
NEW FAMILY OF INDUSTRIAL MICROCOMPUTERS PERFORMS IN HARSH ENVIRONMENT
News Release, pl
Sept 25, 1987
Language: English Record Type: Fulltext
Document Type: Magazine/Journal; Trade
Word Count: 1075

... a
palette of 262,144. The user can easily install one or more of these **graphics controllers** into the same **backplane** to simultaneously **control** multiple **displays** .

Another unique feature of the GESCOMP systems is their networking capability. Using GESNET, a proprietary...

28/3,K/1 (Item 1 from file: 9)
DIALOG(R)File 9:Business & Industry(R)

01334335 Supplier Number: 23993362 (USE FORMAT 7 OR 9 FOR FULLTEXT)
High-Resolution Microdisplays Aimed At Consumers
(Three-Five Systems and National Semiconductor will jointly develop high-resolution liquid crystal-on-silicon micro-displays)
Newsbytes News Network, p N/A
August 14, 1997
DOCUMENT TYPE: Journal (United States)
LANGUAGE: English RECORD TYPE: Fulltext
WORD COUNT: 751

(USE FORMAT 7 OR 9 FOR FULLTEXT)

TEXT:
...reflected from an underlying silicon backplane through liquid crystals that form viewable patterns. The resulting **image** , which is **controlled** by the same **backplane** that reflects the light, can be projected through an optical system or viewed directly on...

28/3,K/2 (Item 1 from file: 16)
DIALOG(R)File 16:Gale Group PROMT(R)

06058801 Supplier Number: 54841614 (USE FORMAT 7 FOR FULLTEXT)
Web Automation Blasts NASA into Cyberspace. (Internet/Web/Online Service Information)
Tebbutt, Dan
Network, pNA
Oct 1, 1998
Language: English Record Type: Fulltext Abstract
Document Type: Magazine/Journal; Trade
Word Count: 3287

... are grouped for high-demand times around liftoff* With Digital NICs and a Compaq QVision **video controller** , the server **backplane** is a 64-bit PCI* Although PCI is a standard nowadays, Dumoulin points out that ...

28/3,K/3 (Item 2 from file: 16)
DIALOG(R)File 16:Gale Group PROMT(R)

05183458 Supplier Number: 47909961 (USE FORMAT 7 FOR FULLTEXT)
High-Resolution Microdisplays Aimed At Consumers 08/14/97
Menefee, Craig; McKenna, Patrick
Newsbytes, pN/A
August 14, 1997
Language: English Record Type: Fulltext
Document Type: Newswire; General Trade
Word Count: 789

... reflected from an underlying silicon backplane through liquid crystals that form viewable patterns. The resulting **image** , which is **controlled** by the same **backplane** that reflects the light, can be projected through an optical system or viewed directly on...

28/3,K/4 (Item 3 from file: 16)
DIALOG(R)File 16:Gale Group PROMT(R)

05183446 Supplier Number: 47909949 (USE FORMAT 7 FOR FULLTEXT)
Alliance To Develop High-Resolution Microdisplays 08/14/97
Menefee, Craig
Newsbytes, pN/A
August 14, 1997
Language: English Record Type: Fulltext
Document Type: Newswire; General Trade
Word Count: 629

... reflected from an underlying silicon backplane through liquid crystals that form viewable patterns. The resulting **image** , which is **controlled** by the same **backplane** that reflects the light, can be projected through an optical system or viewed directly on...

28/3,K/5 (Item 4 from file: 16)
DIALOG(R)File 16:Gale Group PROMT(R)

02766677 Supplier Number: 43709472 (USE FORMAT 7 FOR FULLTEXT)
VU-PAC 8300 & 8400
News Release, p1
March 15, 1993
Language: English Record Type: Fulltext
Document Type: Magazine/Journal; Trade
Word Count: 256

... PAC 8300 & 8400 industrial
workstation which combines, into one powerful package, the darity of a **video graphics** array **controller** , a passive **backplane** , and central
processing and storage capacity to complement a wide array of applications.

The VU...

28/3,K/6 (Item 5 from file: 16)
DIALOG(R)File 16:Gale Group PROMT(R)

01858917 Supplier Number: 42355945 (USE FORMAT 7 FOR FULLTEXT)
Ziatech Introduces First Computer Containing Multiple DOS Processors
News Release, p1
Sept 11, 1991
Language: English Record Type: Fulltext
Document Type: Magazine/Journal; Trade
Word Count: 539

... Corporation. Each processor in the STD 32 STAR SYSTEM operates independenlly and shares disk and **video controllers** over a single **backplane** .

The STAR SYSTEM concentrates the benefits of multiple computers into

a single, compact STD 32...

28/3,K/7 (Item 1 from file: 47)
DIALOG(R)File 47:Gale Group Magazine DB(TM)

04171996 SUPPLIER NUMBER: 16547350
Phoenix 10. (electronic video housing)
Drafahl, Jack; Drafahl, Sue
Skin Diver, v44, n1, p32(4)
Jan, 1995
ISSN: 0037-6345 LANGUAGE: ENGLISH RECORD TYPE: ABSTRACT

...ABSTRACT: fits Sony TR or FX camcorders. It has several innovative features such as magnetically controlled **video** camera **controls** and a special **backplate** that makes it watertight.

28/3,K/8 (Item 1 from file: 88)
DIALOG(R)File 88:Gale Group Business A.R.T.S.

05081886 SUPPLIER NUMBER: 54454983
"Post-hypnotic.". (paintings, various artists, University Galleries of Illinois State University Normal, Illinois)
Yood, James
Artforum, 37, 8, 120(1)
April, 1999
ISSN: 0004-3532 LANGUAGE: English RECORD TYPE: Fulltext; Abstract
WORD COUNT: 868 LINE COUNT: 00073

... nausea) abound here. This is an exhibition that asks, What happens when the viewer loses **control** of the **picture plane** ?
Looking **back** as far as the mid-'80s - the era in which Blinderman made a name for...

28/3,K/9 (Item 1 from file: 148)
DIALOG(R)File 148:Gale Group Trade & Industry DB

04889215 SUPPLIER NUMBER: 09331120 (USE FORMAT 7 OR 9 FOR FULL TEXT)
Jukeboxes ascend - headlong growth ahead.
Urrows, Henry; Urrows, Elizabeth
Optical Information Systems, v10, n5, p220(19)
Sept-Oct, 1990
ISSN: 0886-5809 LANGUAGE: ENGLISH RECORD TYPE: FULLTEXT
WORD COUNT: 13159 LINE COUNT: 01068

... dpi) here, 300 dpi on laser-printed bills to AMEX members. Software rotates any skewed **image back** to the flat **plane** .
The capture- **control** computer (CCC) sends images to random access image servers-also called capture magnetic storage units...

28/3,K/10 (Item 1 from file: 275)
DIALOG(R)File 275:Gale Group Computer DB(TM)

02089775 SUPPLIER NUMBER: 19670791 (USE FORMAT 7 OR 9 FOR FULL TEXT)
Alliance To Develop High-Resolution Microdisplays.
Newsbytes, pNEW08140063
August 14, 1997
LANGUAGE: English RECORD TYPE: Fulltext
WORD COUNT: 679 LINE COUNT: 00058

... reflected from an underlying silicon backplane through liquid crystals that form viewable patterns. The resulting **image** , which is **controlled** by the same **backplane** that reflects the light, can be projected through an optical system or. viewed directly on...

28/3,K/11 (Item 2 from file: 275)
DIALOG(R)File 275:Gale Group Computer DB(TM)
(c) 2006 The Gale Group. All rts. reserv.

01293711 SUPPLIER NUMBER: 07176898 (USE FORMAT 7 OR 9 FOR FULL TEXT)
Acorn enhances its Archimedes 400 RISC workstations. (Acorn Computers Plc) (Reduced-Instruction-Set Computers) (product announcement)
Computergram International, n1154, pCGI04120019
April 12, 1989
DOCUMENT TYPE: product announcement LANGUAGE: ENGLISH
RECORD TYPE: FULLTEXT
WORD COUNT: 190 LINE COUNT: 00013

... of main memory but runs all existing Archimedes packages. The machines come with built-in **graphics** and hard disk **controllers** , four slot **backplane** and co-processor bus, for which a floating point co-processor will be available in...

28/3,K/12 (Item 3 from file: 275)
DIALOG(R)File 275:Gale Group Computer DB(TM)
(c) 2006 The Gale Group. All rts. reserv.

01151913 SUPPLIER NUMBER: 00616640
From the Lab.
Mallery, D.
DEC Professional, v4, n5, p28
May, 1985
LANGUAGE: ENGLISH RECORD TYPE: ABSTRACT

...ABSTRACT: to modify in the future involves two signals which must be brought out to the **backplane** to **control** the mapping process. **Photographs** of the Microverter and instruction manuals are included.

28/3,K/13 (Item 1 from file: 608)
DIALOG(R)File 608:KR/T Bus.News.
(c)2006 Knight Ridder/Tribune Bus News. All rts. reserv.

07338137 (USE FORMAT 7 OR 9 FOR FULLTEXT)
Toy Designs on Display at Hobby Show in Las Vegas Are Child's Play
Matthew Crowley
Las Vegas Review-Journal
October 10, 2003
DOCUMENT TYPE: NEWSPAPER RECORD TYPE: FULLTEXT LANGUAGE: ENGLISH
WORD COUNT: 871

...TEXT: Xboxes and Playstations dominate young people's leisure schedules, hands-on projects such as radio- **controlled** **plane** building are coming **back** , Chandler said.

" **Video** games are something you pick up and master; there's no pride in playing them...

28/3,K/14 (Item 1 from file: 636)

01095340 Supplier Number: 40752730 (USE FORMAT 7 FOR FULLTEXT)

ACORN ENHANCES ITS ARCHIMEDES 400 RISC WORKSTATIONS

Computergram International, n1154, pN/A
April 12, 1989
Language: English Record Type: Fulltext
Document Type: Newswire; Trade
Word Count: 177

(USE FORMAT 7 FOR FULLTEXT)

TEXT:

...of main memory but runs all existing Archimedes packages. The machines come with built-in **graphics** and hard disk **controllers** , four slot **backplane** and co-processor bus, for which a floating point co-processor will be available in...